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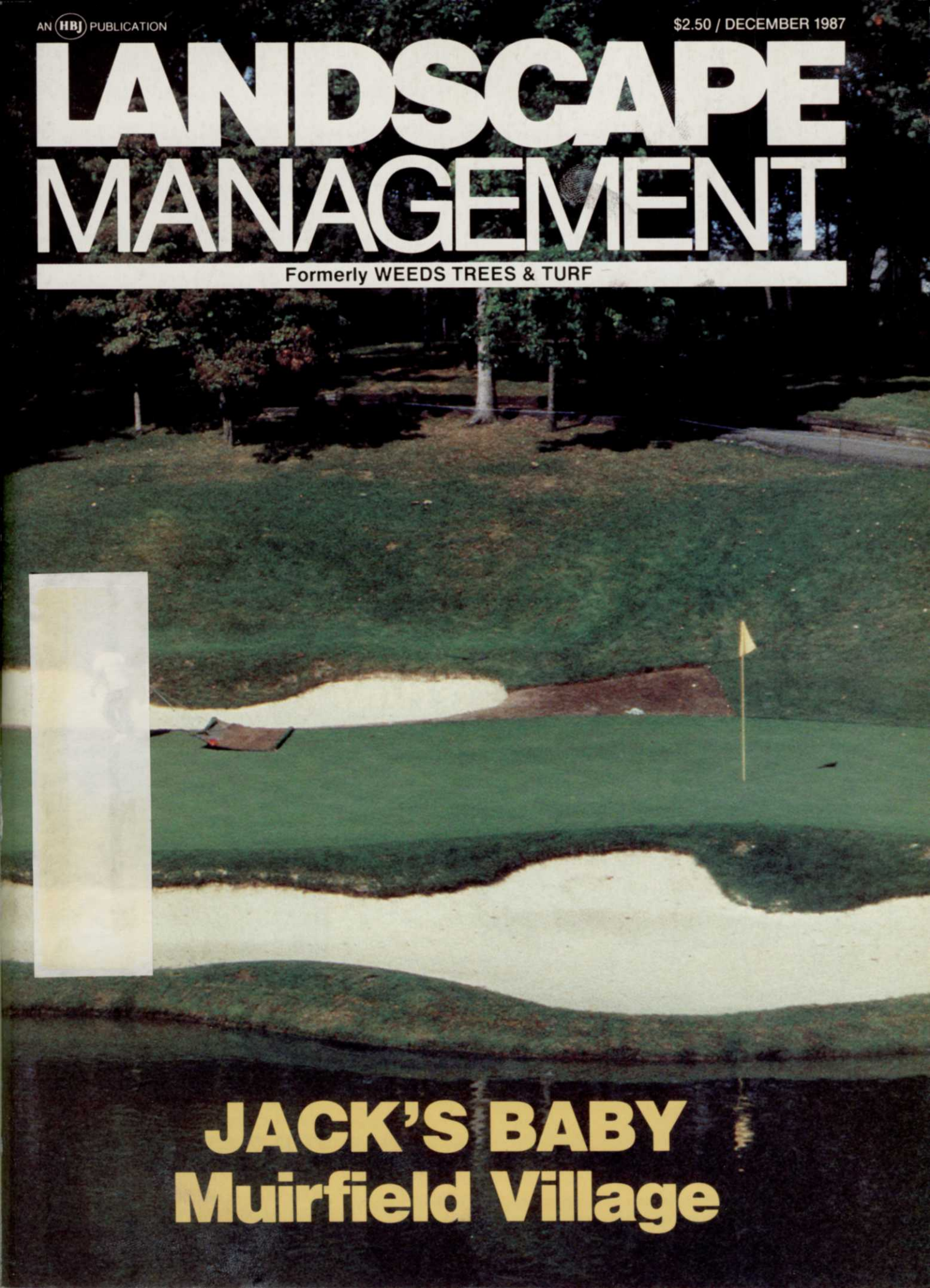

JACK'S BABY
Muirfield Village

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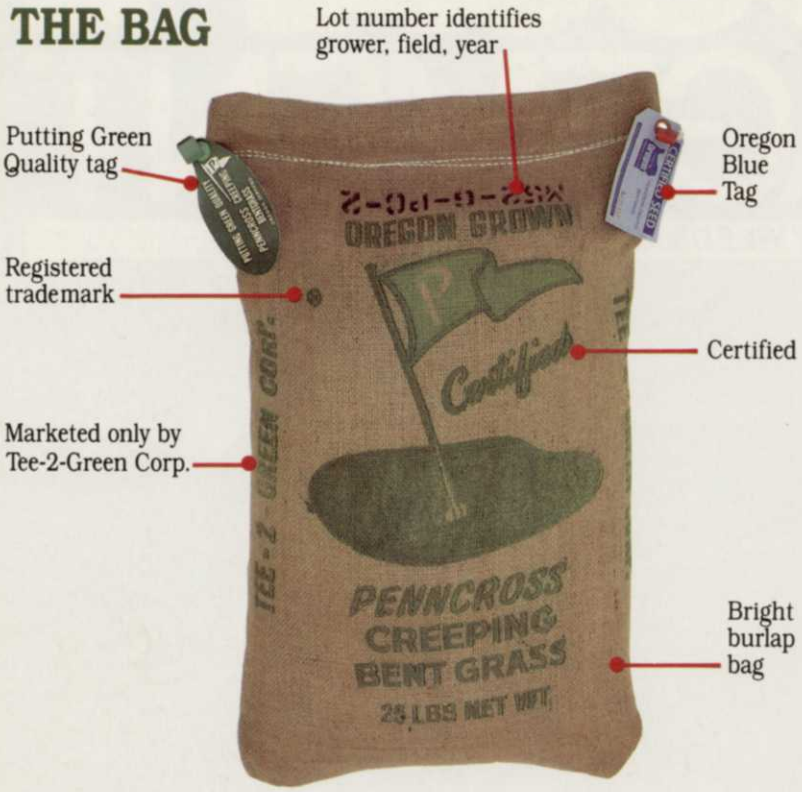

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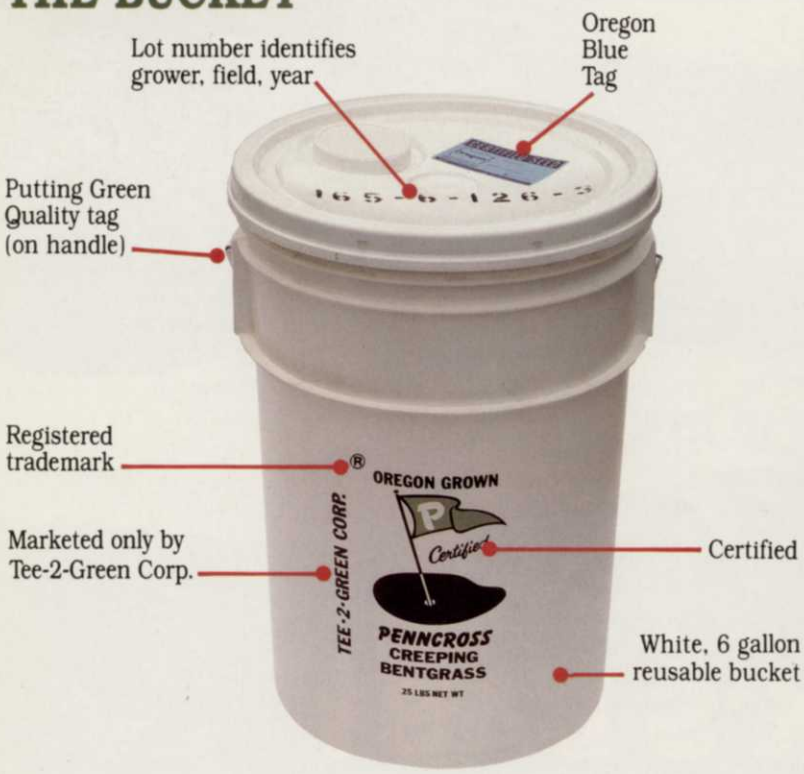

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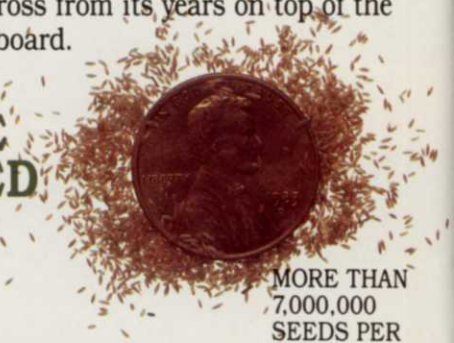

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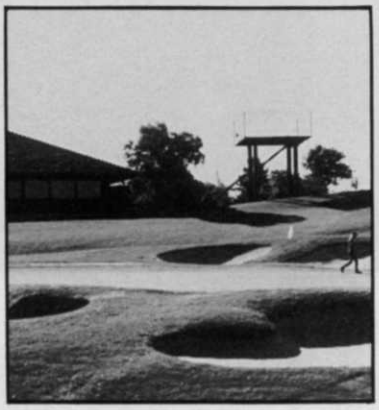

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22 COVER STORY: JACK'S BABY
Muirfield Village Golf Club is the home of the Memorial every year, and, in 1987, the Ryder Cup. It is a well-maintained course—some say the best in the country. It has to be. It's the course that Jack built.

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Yes, the green industry remains strong as 1987 ends. But a good diet of education all around is needed to keep it healthy.

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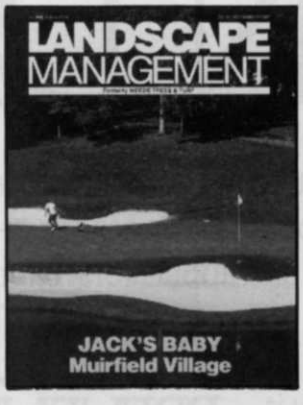

On the cover: Muirfield Village Golf Club; Dublin, Ohio.

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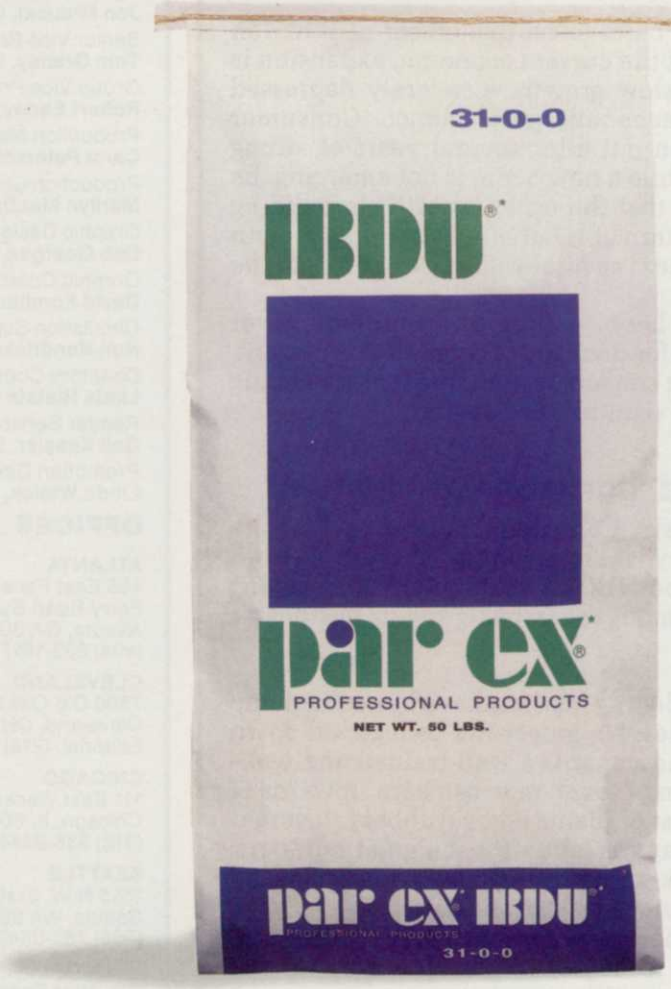

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Circle No. 115 on Reader Inquiry Card

Economy still faltering

■ Although the United States economy is experiencing one of the longest economic expansions in its history, indications are that the economy may not be quite as strong as it appears.

At least, that's what Lawrence Chimerine, Ph.D., told the attendees of the International Lawn, Garden & Power Equipment Expo earlier this year.

Chimerine, chairman and chief executive officer of Wharton Econometrics, explained that the current economic expansion is characterized by relatively slow growth, a severely depressed starting point and uneven economic performance. Consumer spending is starting to flatten out after several years of strong growth, he said. However, while a new boom is not emerging, he said, it does not seem likely that the economy will start sliding into another recession. A pattern of relatively flat or slow growth will remain in place for the next several years or even longer, he predicted.

Chimerine's outlook for lawn, garden and outdoor power equipment sales next year is for declines of three to five percent. One bright spot he sees is that consumer spending for remodeling is beginning to show signs of significant strength.

Green industry called 'burgeoning'

■ What the National University Continuing Education Association calls the "garden industry" is "burgeoning." According to an article by George Faux in the NUCEA magazine, "landscaping and gardening ventures are among the fastest-growing businesses in high-construction areas."

Faux goes on to write:

"The landscaping and gardening markets have blossomed into multi-million-dollar industries. No longer the college kid down the block, today's typical landscaper is a well-trained and well-paid professional; a small firm of seven men can earn upwards of $200,000 a year. The high cost of plants and shrubbery, together with an emerging aesthetic appreciation for the great outdoors, has moved consumers to seek such professional landscapers and horticulturists for their home beautification projects."

The article pointed out the many continuing education programs that provide courses to better prepare landscapers and horticulturists for today's competitive market.

For more information, contact the NUCEA at One Dupont Circle, Suite 420, Washington, DC 20036; (202) 659-3130.

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Circle No. 122 on Reader Inquiry Card

DESIGN

Tips for lighting up Christmas landscapes

Christmas lights can add color and holiday spirit to the landscape—if they're done right. Frank LaGuisa, senior specialist of decorative lighting for General Electric, has designed the National Christmas Tree display for 12 years. He says landscapers should follow these steps in preparing a Christmas display:

● *Determine the objective:* the message to be expressed, viewing angles, sight lines of viewers, natural features, architectural features and structures. Analyze the site, using natural attributes. Find the best location for decorations and features to be highlighted.

● *Select a theme appropriate to the desired image,* such as traditional, modern or religious. Take into consideration local customs, traditions, characteristic decor, ethnic traits and religious customs.

● *Translate the theme into a unified composition.* Establish a focal point and color scheme to maximize effect. Set a unifying format, but play variations against the theme: color, proportions, sizes or treatments. Do not vary eveything.

● *Establish the type of construction.* Determine where devices will be mounted; how they can be reached with the electrical power supply. Consider weight and size limitations. Check out visual conflict with lighted windows, street lights and identification signs. Use skills within your organization and familiar construction methods.

● *Choose lighting equipment.* Select fixtures and lamps with the appropriate wattage, size, type, and color. Plan for the quantity of lamps necessary to provide the planned pattern and brightness.

Norway spruce and Eastern red oaks "dressed up" for Christmas

To figure exactly how many lights are needed, LaGuisa suggests this formula: for the number of string set lights needed to give a tree a "full" effect, multiply the height of the tree by the width of the tree (in feet) by three. Trees larger than 50 feet may require medium-base lamps, while trees less than 10 feet can use "midget" lamps. When using plug-based midget lamps, modify the formula by multiplying by six or eight, rather than three.

Create color impact by using solid or limited color combinations. Ironically, the more multi-colored lights on one display, the less vivid is the perceived color. Multi-colored sets with equal numbers of gold, red, green and blue lamps will produce a yellowish-white light, since the primary colors produce white light.

The color impact hierachy is: gold lamps are the brightest, followed by red, then green, while blue has about one-fifth the visual impact of white lights. For best results, use brighter colors on focal points or foreground elements, and dimmer colors on background elements.

Outlining structures is a simple and effective way to decorate for the holidays. Add liveliness to the display by installing a twinkle lamp in every sixth socket. Heavier use of twinkle lamps will produce a busy effect.

For colorful examples of Christmas lighting, see "On Design."

A portion of Highway 90-A's median

RIGHTS-OF-WAY

Government, business cooperate on highway

The largest matching fund program in Texas' highway beautification program has been announced by Lexington Development Company. The unique partnership of state government and private business has produced a 500-foot wide, 2½-mile long belt of blazing color.

The $500,000 project lies along Highway 90-A between Sugar Land and Richmond, southwest of Houston. It fronts Lexington Development's 3,100-acre master planned community, New Territory, which will contain 8,500 homes, office, commercial and retail buildings. The program includes a mix of wildflowers, grasses, shrubbery and trees planted along the median and both sides of the property.

SHORT CUTS

INDUSTRY

Twenty-five years of service to industry

"The green industry is larger than we ever thought it would be," comments Jim FitzGibbon, celebrating the 25th anniversary of his company, Lesco, Inc. "Lawn care was barely thought of at that time (1962). It then was the creampuff. I believe we were the first people to recognize lawn care as a market. And golf course budgets have increased dramatically in that time, too."

Jim FitzGibbon

Lesco, under the guidance of FitzGibbon and co-founder Bob Burkhardt, has grown from sales of $75,000 in 1962 to almost $95 million in 1987. What's the secret to the company's success, which has come from sales through a fleet of vans, drive-through turf supply stores and inside telephone sales?

"It's all people that make a business successful," FitzGibbon says. "We also take a total market approach."

FitzGibbon, forever looking to the future, concludes: "It's been difficult, but it's been fulfilling for all of us. It's been exciting, and it's more exciting now than ever before. I think I'll stick around for the fun."

LEGISLATION

California laws flawed, claim UCR researchers

California laws which seek to limit pesticide use and protect the environment have had the opposite effect in many cases, say researchers at the University of California at Riverside.

Current California law has resulted in increased pesticide applications on ornamentals because it delays the registration of newer, more effective pesticides in the state. Provisions of the law can also contribute to the development of pesticide resistance in many insects, a news release from the College of Natural and Agricultural Sciences notes.

"Time delays between national registration and the registration of pesticides in California should be reduced," says UCR emtomologist Michael P. Parrella. "The current lag-time of three to five years puts Califor-

Continued on page 14

PESTICIDE POISONINGS... In 1988, all Hawaii physicians will be required to report any pesticide-related injuries or poisonings. Dr. Bruce Anderson, deputy director of environmental programs for the Hawaii Department of Health, says the state will follow in California's footsteps in requiring the reports. "We now have a good diagnostic test for organophosphate poisonings," Anderson says. Despite the test, Anderson told the Pan Pacific Turfgrass Conference that it may take several years to get physicians to recognize the symptoms.

FOR JOB-HUNTERS ONLY...ACRT Inc. is in the business of training green industry workers; they've trained more than 2,600 in the last two years. They've now established a toll-free number to help their graduates find job openings in tree, landscape, line clearing, lawn care companies and nurseries. The number is (800) 622-2562—for ACRT grads only.

A NEW WEAPON... Riverdale Chemical Co. has received EPA registration for Weedestroy Triamine II, a three-way post-emergence selective broadleaf herbicide. Weedestroy Triamine III contains amines of MCPA, mecoprop and dichlorprop to kill dandelions, chickweed, plantain, oxalis, spurge and many other weeds. The amine formulation was developed as an alternative to 2,4-D.

BREATHING EASIER... 3M Corporation will release a revolutionary respirator in early 1988, according to 3M account representative Bill Fink. Fink told the Pan Pacific Turfgrass Conference that the respirator will be known as the Powered Air Purifier Respirator (PAPR). PAPR will fit on a worker's belt and be rechargeable overnight for more than 10,000 hours. The respirator is being test marketed in Hawaii because of the state's high temperatures. Kathy Kramer, marketing/communications administrator at 3M's headquarters in St. Paul, Minn., would not release any further information on the new product.

PEOPLE NEEDED... Landscape Horticulture Center for Personnel Development is concerned with the lack of a viable work force in the landscape industry. So what's it doing? Developing an Apprenticeship Training Program for Landscape Technician and Landscape Management Technician. L.H.C.P.D. is a non-profit green industry support group structured to work with regional and national green industry organizations in areas of common interest. For more information, write or call: 2509 Thousand Oaks Blvd., Suite 109, Westlake Village, CA 91362; (805) 498-6916.

KINDRED SOULS... Landscape managers in Maryland have united to form the Maryland Seeding Association for people who seed lawns, provide erosion control and do other contract seeding. They are looking for other such organizations in the United States to "compare notes." If you know of such an association, give Maryland president Jim Patton a call at (301) 924-4445. Or you can call executive secretery Diane Patton at (301) 384-6300.

HONORARY HONORS...C. Reed Funk, Ph.D., became the American Sod Producers Association's newest honorary member at the group's convention last summer. The world-renown turfgrass breeder and researcher joins only 10 others who have been chosen by the ASPA Board of Trustees for this honor in the organization's 20-year history.

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Circle No. 112 on Reader Inquiry Card

nia growers as a competitive disadvantage because they have higher costs of production."

California, for instance, leads the nation in chrysanthemum production, but 23 percent of the crop is lost each year to leafminer damage. Parrella claims that several insecticides not yet registered in California would provide adequate leafminer protection with lower levels of insecticide actually being used.

Parrella and fellow researcher John T. Trumble have suggested the formation of a Scientific Advisory Panel to provide in-depth information on the potential of registering new chemicals. The registration of a chemical for use against one pest can disrupt the resistance management strategy for another, they note.

PESTICIDES

Endangered species laws on the horizon

Beginning Sept. 20, 1988, the use of all high-leachibility pesticides will be restricted to areas not populated by endangered species of wildlife, says Carlton Lane of the U.S. Environmental Protection Agency.

"Endangered species labelling has the potential to affect you more than anything the EPA has done since 1972," Lane told landscape managers at the National Roadside Vegetation Management Association's annual meeting.

The U.S. EPA is mapping out endangered species ranges nationwide for certain pesticides. The ranges are designated by county.

Carlton Lane

"County maps are being distributed starting in December to county agents," Lane notes.

The Endangered Species Act will take precedence over the Federal Insecticide, Fungicide and Rodenticide Act, which governs the use of pesticides.

Warnings called "groundwater advisory statements" will be placed on the pesticides. Users will then have to call local fish and wildlife service offices if they want permission to use these products in restricted areas.

The first pesticide "cluster" to be affected by the new labelling will be mosquito larvicides and forest pesticides. Rangeland pesticides, major crop pesticides, aquatic pesticides and non-cropland pesticides will follow, Lane says.

Each state will have fish and wildlife enforcement agents to consult with pesticide users. (The Fish and Wildlife Service will be the first federal agency besides the EPA to regulate pesticide use.)

"Right now, we have really no feel for how many lawn and ornamental pesticides will get drawn into this," says Bob Wulfhorst of the Ohio EPA.

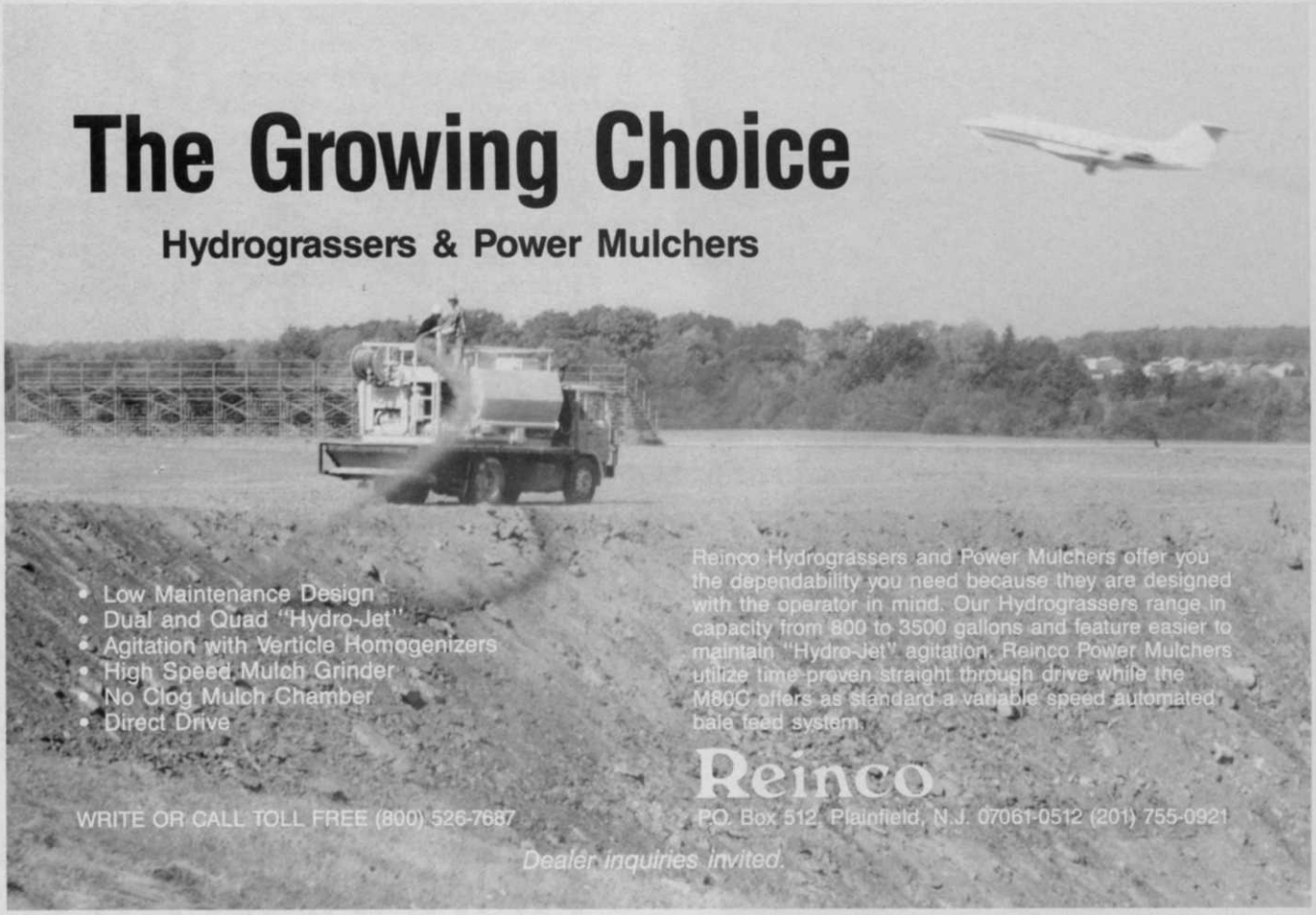
CONFERENCES

GCSAA doing things Texas-style: big

The 59th International Golf Course Conference and Show in Houston is expected to eclipse last year's record attendance of nearly 13,000.

The show, conducted by the Golf Course Superintendents Association of America (GCSAA), is expected to clear the 13,000 mark during the show, February 1-8 in the George R. Brown Convention Center.

The GCSAA reports that trade show exhibit space reservations are ahead of last year's pace, when more than 300 commercial exhibitors displayed their supplies and equipment.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Besides the huge trade show and extensive educational seminars, the conference provides the association the opportunity to present scholarship awards, recognize distinguished service and also present the association's highest honor, the Old Tom Morris Award.

The GCSAA reports that hotel space is dwindling as reservations come in. For more information on the conference, contact the GCSAA at 1617 St. Andrews Dr., Lawrence, KS 66046; (913) 841-2240.

CONFERENCES

Short Course opens registration to Jan. 4

The 1988 Short Course in Horticulture, Jan. 12 to Feb. 11, 1988 is now accepting registrants.

The five-session course will be held in Los Angeles County, Orange County and San Bernardino County, Calif. Topics include "Water Management of Ornamental Plants" by Randal Ismay and Janet Hartin; "Environmental Problems in the Nursery and Landscape" by Paul Rogers; "New Ornamental Plant Introductions by Jan Groot, Mike Evans and Rodger Duer; "Pruning and Training Shrubs" by Richard Baldwin; and "Weed Control in the Nursery and Landscape" by Clyde Elmore.

To register, send $25 (check payable to Horticulture Education Fund) with your name and address to Ed McNeill, 2492 E. Mountain St., Pasadena, CA 91104 by Jan. 4.

CHEMICALS

EPA amends fungicide label

After numerous meetings, the Environmental Protection Agency has advised the W.A. Cleary Chemical Co., that adjustments to its Caddy Liquid Turf fungicide, the only labeled cadmium-based fungicide, will be necessary.

"W.A. Cleary fought vigorously to protect the Caddy label," the company says. "We met on numerous occasions with the EPA and presented our case to a specially convened Scientific Advisory Panel."

Cleary agreed to the following changes to the new Caddy Liquid Turf label:

- Expanded list of diseases controlled, including dollar spot, copper spot, brown patch, damping off, fading out, leaf spot and melting out, red thread, pythium blight and snow mold;
- Restricted to use on only greens, tees and aprons;
- Ristricted to use by or under the direct supervision of a licensed pesticide applicator; and
- Restricted to use in power sprayers only—no backpack or manually operated sprayers.

Use of Caddy, as before, is prohibited in California, Connecticut and Wisconsin.

LAWN CARE

Barefoot buyout scrapped for now

Though both companies had signed a letter of intent, Barefoot Grass Lawn Service of Worthington, Ohio, will not be bought as planned by CDS Holding Corp. Negotiations were discontinued after about three months, says Barefoot president Pat Norton.

CDS Holding Corp. was formed by New York-based Clayton Dubilier for the purpose of buying Barefoot Grass. Clayton Dubilier owns O.M. Scott & Sons.

A notice to O.M. Scott employees said: "Discussions between Barefoot and CDS have continued until recently. Unfortunately, a final agreement satisfactory to both companies could not be reached.

"We are disappointed that this transaction could not be completed. Barefoot is an excellent company with an outstanding record of growth and profitability.

"We will renew our efforts to find ways to enter and benefit from the lawn care service business."

Ron Gagne, commercial sales manager for O.M. Scott, says "We're all very disappointed. We hoped and worked very hard to make it work."

Norton says he won't rule out the possibility of Barefoot being sold in the future. "We saw it as a positive step if it happened but we're also pleased with the results of the company (Barefoot)," he says.

Barefoot had total sales of $22 million in 1986, including both corporate and franchise revenue.

RESEARCH

Turf herbicide can reduce contamination

A turf herbicide designed to reduce groundwater contamination dangers was developed and patented by a researcher from the University of Florida's Institute of Food and Agriculture Sciences (IFAS).

The herbicide, to be marketed by Ciba-Geigy under the trade name "Premier," controls weeds in lawns, golf greens and other grassy areas. The company is awaiting EPA registration.

Agronomy professor Merrill Wilcox, Ph.D., synthesized the chemical compound for the herbicide. He has assigned patent rights for the product to the University of Florida so it will receive royalties on sales.

Wilcox, who is also licensed to practice patent law, says EPA registration is the last hurdle. He is hoping for registration during 1988.

"We are confident EPA will look favorably on this herbicide," Wilcox says, "because of its low toxicity and because it will be for non-food use."

Wilcox explains that because of its low water solubility (18 parts per bilion), the herbicide will pose no danger of groundwater contamination in places like Florida, where compounds tend to move easily through the sandy soil profile.

The new product has been seven years in developing and testing, according to Wilcox.

IRRIGATION

Efficient irrigation needed in xeriscapes

A properly designed and installed irrigation system plus efficient watering and system management are essential to "xerigation," the irrigation part of a xeriscape.

Xerigation design, says Larry Keesen of Larry Keesen Ltd., Englewood, Col., combines 10 basic practices for efficiency:

1) Border irrigated areas to prevent runoff.

2) Control pump pressure.

3) Maintain uniform precipitation rates.

4) Create separate irrigation zones for turf and planting beds.

5) Zone for exposure.

6) Avoid using large heads in small areas.

7) Use drip/bubble emitters.

8) Check valves under low heads.

9) Require three to four inches of pop-up height; this is done do allow for general upward building of developing turf areas.

10) Use digital or solid state electronic controllers; they are the most accurate.

Keesen adds, "without proper maintenance, all is lost."

On a weekly basis, he suggests operating the system after mowing to check for misaligned sprinkler heads, leaks, plugged heads, dry spots and turned heads. Leaks can be found by listening to the line with a stetho-

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scope, or walking the line.

On a monthly basis, change the amount of water put down by adjusting controller timing to fit seasonal water needs. Also, check zone control valves for seepage by looking for wet spots and continuous drainage from low heads.

Semi-annually, check for leaks in valve boxes and flush drip system lateral lines by removing the flush cap or opening the flush valve. Clean filters and strainers and aerate turf areas to improve infiltration.

On a yearly basis, heads should be raised to accommodate thatch buildup if necessary. Rain shutoff units should be tested by pouring water on the devices. Flow meters should be checked with the system under pressure, though not operational, and with no domestic water use while testing.

Test the backflow preventer as suggested by the manufacturer. In freezing climates, shut off and winterize the system in the fall, using manual drains if possible.

Keesen spoke at the International Irrigation Exposition and Technical Conference Oct. 26 in Orlando.

LAW

Protecting against lawsuits

Lawsuits are won or lost long before the opposing parties enter a courtroom, says Mike Olexa of Quality Control. Landscape managers need to be aware of "preventive law."

"What we're really talking about here is a matter of business survival," Olexa says. "Be aware of your business vulnerabilities."

Olexa recommends several steps to avoid lawsuits.

● Draw a map of the lawn area to be treated. Note the environmental conditions at the time of application. Note the application procedure. Apply the product only according to label. Check the application equipment. Check if the client applied anything to the lawn previously.

● Have the customer date and sign any documentation you make concerning the job. Give the customer a copy. If the client refuses to sign, give the customer a copy anyway. Every piece of paper and everything you say is subject to review in a lawsuit.

● Be alert to any trouble signals within your dealings. Be aware if the customer has refused to pay bills in the past. Be especially careful in dealing with customers under financial stress or those with a history of litigation.

● Preparation begins in your office. You can't limit education to field personnel. Even phone operators should be educated. "Take the office staff into the field," Olexa says. "It's an investment, not an expense."

● Time is of the essence. Respond immediately to any complaints. Don't make any admissions. Simply tell the client you will carefully study the situation. When you do, take careful notes and photographs. Make sure the notes will be understood months down the road.

● Proper conduct is essential in diffusing a potential lawsuit. Proper conduct includes handling a complaint and conducting the field evaluation. "Preparation and awareness are extremely important," Olexa explains.

● Establish a good line of communication with clients. Always be friendly and be a good listener.

● Keep good records. Don't take chances. Stick to your area of expertise. When in doubt, don't.

● Examine your insurance policy. But don't tell anyone about the policy. It's a confidential business matter.

"Ask yourself, does the prospect of economic business gain and ecological soundness, exceed the possible loss or ecological damage," says Olexa. "Your chances of being sued are excellent and getting better every day." Olexa spoke to the Florida Turfgrass Conference.

HEALTH

Be skin conscious with sun and chemicals

Employers should pay for workers' sunscreen, says Dr. Robert Shapiro, skin specialist in Honolulu, Hawaii. Shapiro says sunscreen is a safe way to protect against skin cancer. By providing it to employees, companies can help keep health insurance costs down.

"All kinds of skin cancer can be prevented by sunscreen, clothing or a wide-brimmed hat," Shapiro says. Landscape managers and golf course superintendents need to be especially careful with sun exposure since they work outside.

Shapiro says sunscreen has changed over the last decade. It used to be that manufacturers couldn't list a Sun Protective Factor (SPF) higher than 15. Today they can list whatever the actual SPF is. The SPF number shows the number of times more that skin is protected over straight exposure to the sun. In other words, a sunscreen with 10SPF would take 10 hours to produce the damage usually done in one hour.

It's also important to check the ingredients. Some sunscreens are alcohol-based and don't stay on as long as greasy sunscreens. It's also important to see whether the sunscreen covers for UVA light or UVB light. You should try to be covered for both.

Shapiro says the most dangerous time for sun exposure is between 10 a.m. and 2 p.m. He warns that it's important to keep re-applying suncreen since it washes off with sweat.

Skin cancer is the most common cancer in all adults over 65 years old. Shapiro says to watch all spots on the skin either for new ones or those that have changed. A change could be in the pigmentation, surface, shape or sensation. Red, white, blue, gray or black are suspicious colors of moles.

"Try to pick up on it before it bleeds," Shapiro warns. "By the time a melonoma bleeds, it may be too late."

Sunscreens, and allergies to chemicals, plants or insects can cause a rash or skin reaction which is not cancerous. If you get one from a suncreen, read the ingredients and try to switch brands. If you think the reaction is from something else, see a doctor.

"If you have any questions, you should go to a dermatologist," Shapiro says. "Most G.P.'s don't have the knowledge."

Shapiro says most dermatologists have pre-set patches to test landscape managers for allergies to plants or chemicals. The patient leaves a patch on for two days while the doctor monitors the reaction. Two patch tests can be done at one time. Most dermatologists can easily distinguish between cancer, fungal infections, insect bites and allergies.

LANDSCAPE CONTRACTORS

LANDSCAPE MANAGEMENT will run its annual "Top 50" list of Landscape contractors in the February issue. If your company had sales of $2 million or more in 1987, and you want to be included in the list, call us by December 16 at (216) 243-8100.

"Our mowers are the backbone of our business. We use only Buntons."

Jack Roberts, President
Environmental Landscape Services, Memphis

"We run 16 crews with 80 people to provide the best care possible for large commerical properties," says Environmental Landscape Services president Jack Roberts. "We depend on our equipment to help us maintain our reputation as one of the best."

Roberts has experimented with other commercial mowers over the years, but now uses only Buntons. At last count he had 29 of them. Here's what the company's supervisors say about Bunton mowers.

Long Life

"We get years of hard use out of our mowers. All of our equipment is two-cycle, so maintenance is simple, there are no fuel mix-ups, we get added torque, and we don't burn up engines when we run them on steep hills," says John Sumner.

Dependability

"The dependability of the mower is incredible," says Leslie Clark. "The design is well thought out and the workmanship is the best I've ever seen. We know our Buntons will start in the morning, run all day and be ready to work tomorrow."

Quality Cut

"We provide a weed-free, scalp-free turf for the highest profile clients in town," says Paul Summers. "We're known for our quality of cut. With Bunton we always get the good, clean cut we need, even under the most demanding conditions."

Track Record

"Year after year, Bunton has proven to be a quality piece of equipment," says Gary Smith. "Serious thought and continuous research goes into all of our purchasing decisions, and we only buy equipment that takes care of us and our customers."

If mowing is the backbone of your business, you need quality equipment that will take care of you and your customers. Call for the name of the local Bunton dealer in your area.

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This proven PGR program for irrigated, low-traffic ornamental turf saves you 3 mowings or more per treatment . . . while at the same time thickening up the grass and improving its appearance. Read about our special $100.00 demonstration incentive offer.

Everett Mealman, *President*
PBI/Gordon Corporation

For several years, universities, landscape management professionals and PBI/Gordon have been experimenting with PGRs in an effort to adapt their usage to ornamental turf. The problems that have concerned all of us are discoloration and the long-range effect that a PGR might have on the health of turf grass.

Today, we can confidently report that PBI/Gordon has a proven program for using Embark PGR on irrigated, low-traffic ornamental turf. It is based on 2 years of testing by Washington State University researchers. Furthermore, this program has been fine-tuned and successfully used on hundreds of acres of commercially managed ornamental turf.

It reduces the maintenance cost by eliminating 3 and sometimes 4 mowings of cool-season grasses that would otherwise be required and, in the process, measurably enhances the vibrant green color and long-range health of the turf.

It is a major breakthrough in landscape management and we are announcing a special, one-time $100.00 demonstration incentive offer to help you test the program.

Four reasons why our Embark program works

In the first place, the rate for Embark is reduced from 1½ pints per acre to 1 pint. The objective is not to totally shut off the growth so that no mowing is necessary. Rather the objective is to *slow it down* to such an extent that the number of mowings can be reduced by 50% or more for a period of up to 6 weeks.

The second factor is the use of Ferromec® AC Liquid Iron Complex in the program. Ferromec is PBI/Gordon's patented iron/urea molecule bond that is foliar absorbed and circulates within the plant so rapidly that green-up occurs within 24 to 48 hours. It is an ideal tank-mix companion because Embark does not begin its work until 48 hours after application. Thus, when Ferromec is combined with Embark, it has the green color firmly fixed before Embark kicks into gear.

In the third place, Embark and Ferromec AC can be tank mixed with either Classic Trimec® or Super Trimec Turf Herbicide, thus giving the PGR/Iron treatment a free ride, since you are going to spray Trimec anyway.

And, finally, there is the fact that Embark is a true Plant Growth Regulator, in contrast to some so-called PGRs that are actually herbicides to be applied at low rates which all too often

Paul Constant, left, president of Constant Care Inc., and Everett Mealman examine the tillering and root development of a plug of grass from a shopping center lawn treated with the Embark/Ferromec program in the spring and autumn of 1987. This photograph, taken on October 7, clearly shows the lush, thick, vibrant green turf produced by the Embark/Ferromec program!

may stunt the growth and weaken the plants.

Embark, on the other hand, is a PGR in the strict meaning of the word. It is absorbed through the blades and translocates to the growing point (at the base of the blade), where it acts to suppress seedhead development and stem elongation. The energy which would normally be used to produce rapid growth of leaves, stems, and seedheads for you to mow, is diverted to root and rhizome development.

Timetables and program for using Embark PGR on ornamental turf

A tank mix of Embark, Ferromec AC, and Trimec is applied in the spring, ideally timed to catch the seedheads. This would be a window of about 4 to 6 weeks between the time when the grass begins to green up and when you can feel the seedhead in the boot.

This treatment will result in lush, vibrant green, weed-free turf that is growing so slowly that at least half of the regular mowings can be eliminated for up to 6 weeks.

The Embark will wear off at about the same time that hotter weather starts causing untreated grass to lose some of its color and condition. But because the Embark treated grass has been on *slow-hold* and conserving the energy that would otherwise have been dissipated on *fast-forward,* it will start living it up and reach a zenith of beauty when the untreated grass has run out of gas.

Along about August 15, or when cool-season grasses start to grow vigorously again, repeat the treatment. The need for mowing for the next 6 weeks will also be reduced by 50% and more.

The experience of a leading landscaper with Embark PGR

One of the most successful users of the Embark program for ornamental turf is Constant Care Inc., who is one of the leading landscape management contractors in the Kansas City area. It's evident why they would be an early adapter to Embark, when you know their business creed. Paul Constant, president of the corporation, states it this way:

"We've been experimenting with PGRs for 4 or 5 years," says Bill Gordon, director of commercial landscaping maintenance for Constant Care Inc., "and we've found that Ferromec AC is *the* vital element in making the Embark PGR program feasible for ornamental turf. Other irons simply don't work fast enough."

"Our mission is to provide a total, turn-key job: landscape design, installation and maintenance, including turf, ornamentals, and even irrigation. We seek and serve progressive clients who recognize that exterior decoration is every bit as important as interior decoration.

"We will provide these clients with an overall landscaping look that projects a clear image of top quality; and we will accomplish this objective within the framework of a budget that is competitive, and at the same time sufficiently profitable so that we can grow and prosper and adequately compensate our dedicated people who make it happen."

No wonder Constant Care is on the leading edge of progress, rather than mired in a status quo mind-set that bases landscape management charges on an a la carte menu rather than the *mission accomplished* bottom line that the client really wants!

No wonder Constant Care Inc. is one of the 30 fastest growing companies in the Kansas City area!

$100.00 demonstration incentive offer:

Admittedly, using Embark PGR on ornamental turf is a challenging thought, and thus it is that we want to suggest that you test the program on 8 acres of turf so you can see for yourself the unprecedented impact that Embark is destined to have in the management of ornamental turf.

To test the program on 8 acres of irrigated, low-traffic turf, you will need 1 gallon of Embark, 22 gallons of Ferromec, 2 gallons of Super Trimec or 4 gallons of Classic Trimec. When you have completed testing a minimum of 4 acres, you are entitled to your check for $100.00.

Call us toll-free to let us know that you want to participate in the test. We will tell you how to manage the program, and will refer you to a distributor in your area who will supply you with product and any information you need.

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COVER STORY

After this year's Memorial Tournament in May, the turf around the 18th green and concession area was bare from attendees trampling on the rain-dampened turf. With intense overseeding, by September it was perfect.

JACK'S BABY

Muirfield Village Golf Club is the home of the Memorial every year, and in 1987, the Ryder Cup. It is a well-maintained course—some say the best in the country. It has to be. It's the course that Jack built.

by Jeff Sobul, assistant editor

This is a stadium golf course. Not in the sense that Pete Dye's courses are stadium golf courses, with embankments contoured into grandstands and the like.

Rather, Muirfield Village Golf Club was designed to handle the 40,000 to 50,000 daily spectators who each year attend the Memorial Tournament. The Dublin, Ohio, course was essentially built for the Memorial, and was also the site of 1987 Ryder Cup matches.

When LANDSCAPE MANAGEMENT visited superintendent Michael McBride on September 1, the course was entering final preparations for the Ryder Cup, about two-and-a-half weeks away.

Play on the course would soon be limited to member play only, up until the day before the week of the Cup. Guest play would be cut off two weeks before the Ryder began.

From the day the Memorial ended on May 31, preparations began for the Ryder Cup.

Rain on the third day of the Memorial caused problems. "There was no turf here at the end of May," McBride says, indicating with a sweep of his arm the areas around the 18th green and the main concession area adjacent to the clubhouse. "It was bare. We did a pretty intense overseeding program right after the tournament. I've been happy with the way it turned out so far. A couple of weeds in it yet, but we'll take care of those."

Standing along nearly every hole are television towers. Usually after the Memorial they are removed from their permanent in-ground foundations and placed in the outside TV complex until the following year. But with the Ryder scheduled, they were left in place to avoid the hassle of putting them up again just a few months later.

Alterations

"This is one of my favorite holes," McBride says, standing on the tee of the picturesque par-three eighth hole. Thick trees line the right side of the hole, providing a buffer between the course and the expensive houses just

McBride's staff raised the left side of the eighth green slightly to aid drainage and reduce wear on the walk-off area.

on the other side. The cart path winds down the left side to the green.

"We made this little mound here right after the Memorial," he says a few minutes later, standing just off the left side of the green. "This was raised about two inches because (water) came off and it was really flat here and we didn't have any good surface drainage. The water would sit here and we couldn't grow good turf.

"We contoured it just a little bit—not a lot, just enough to get good surface drainage. Actually, the surface drainage comes in toward the center of the green and then out the front (through a drain tile in a bunker and into a catch basin). It was that or reconstruct the whole (left) side, which wasn't going to work.

"We just brought this together and put a drain in there. We top dress this (left) side about every four days to bring it up and keep the level of the green together. Once we take it down to tournament cutting height, it all has to be even. You can't have any scalped areas or areas that are too low getting growth that's too long and hairy. It's important to keep an area like this top dressed and the transition area top dressed so it all smooths out." At the time, the cutting height was at $^{9}/_{64}$ of an inch. It would be taken down to $^{5}/_{64}$ for the Ryder.

"This has always been a tough green to maintain," he says of the eighth. "One of the problems on this green is that we don't have enough air movement. Usually, you have a wind coming out of the west. We've thinned out this whole area through here just to get additional air movement. Especially working with bentgrass, you've got to have some air movement, you've got to have a lot of sun to grow good turf. We've got another area on 12 that's stagnant as far as air movement goes."

Work on 12 is more extensive than just thinning the trees. The par three covers 160 yards over a sprawling pond below the elevated tee. The worn walk-off area straddling the bunker to the back of the green has been dug and painstakingly leveled. "We'll get the sod in there, pin it, and use a good starter fertilizer high in phosphorous and potassium," McBride explains. "That stuff's just like glue. It'll stick. (The roots) will be down in there in another four or five days, and in two-and-a-half weeks you won't even know it was sodded."

Tickling the fairways

A lightweight triplex mower cuts across the seventh fairway at a 45-degree angle, making the alternating light and dark green pattern so appealing to TV cameras. McBride takes a couple of golf balls from the golf car and drops them onto the freshly-cut fairway.

"It's a nice lie," he comments from one knee. "It's only at a half an inch. I'm not a real believer in having them (cut) too tight. You ever want to hit your three-wood off a tee without a tee? Would you think you could hit the shot? Even for some pros it's tough. They need to have a little cushion."

He walks ahead to an uncut area on the fairway. Grooves are visible from verticutting. "It brings it up real nice," he says of the verticutting. "Then you just cut it off. You see how it brought it up?" McBride runs a hand through the bentgrass then motions toward the mower operator. "He's taking off a lot more than he normally would if he weren't verticutting.

"I'm a firm believer in verticutting. This summer, because it was so dry, we couldn't go out because it would bruise (the turf) too bad. So I didn't get to verticut as much as I wanted. This is really a greens verticut unit (on the fairway). So we're just tickling the top to try and train it. It makes a difference, though. If we do this once or twice before the Ryder Cup, then they'll be just where we want them."

Good luck, bad luck

During the summer, central Ohio went through a period of about seven weeks with less than a half-inch of rain. "We went out a week ago and fertilized the rough for the Ryder Cup and then it rained." McBride shrugs his shoulders and smiles. "I mean, what more could you ask for?"

How about a broken hydraulic hose on one of the triplexes, at the

McBride is a firm believer in verticutting. In preparation for triplex mowing, an operator uses a greens verticutter on the 10th fairway without interferring with the golfers.

time grooming the 15th green?

It happened on August 23, just a month before the Ryder. A portion of the green was a mess. "It happens," McBride says with the comfort of knowing that it will recover in time for the players and the cameras. "You don't know when it's going to happen. But it always seems to happen at the most unfortunate time." A few years ago, he recalls, the same thing happened on the approach to the 18th green. Worse yet, it was on the Friday *of* the tournament. "At least this time I have a couple of weeks to recover."

Indeed, on hands and knees, the green of fresh bentgrass is invading the brown area. "It's coming back. I'll have to plug out a few areas. It looks terrible but it's not as bad as it looks. There's a lot of new growth coming in. It won't take long for that to really run in."

And it won't take long for McBride and his staff to have Jack's Baby in perfect health for the Ryder Cup either. **LM**

A BACK-DOOR CAREER MAN

Six years ago, Michael McBride was selling computer systems. The rapid transition he's made to superintendent at Muirfield Village Golf Club is something no computer could figure out.

As an undergraduate at Bowling Green State University, McBride worked the summers of 1973 and 1974 at Muirfield, while the course was under construction. "I guess what I liked was that I could do something with my hands, labor, and you could see it evolve, emerge," he says.

Except, he was a political science major. At the time, he considered switching to agronomy. "But I was so far along I said, 'Aw, I'll just get my degree.' It wasn't a very good attitude at all."

Michael McBride (right) instills in his staff, the pride he holds for Muirfield. He checks the progress of verticutting on the 10th fairway with the operator of a greens verticutter, used on the fairway to stand up the bentgrass before mowing to control lateral growth.

He graduated, he sold and he did well for himself. "But I had a problem," he explains, "especially in the springtime.

"I was on straight commission as a computer salesman. But I'd go by a golf course and—zoom—there I go, sharp turn into the front drive. It hurts your livelihood. You're not bringing home the money you should. You should be out working."

Things had to change.

He wrote a letter to friend and mentor Ed Etchells, Muirfield's superintendent at the time McBride worked there. Etchells, now Jack Nicklaus's right-hand maintenance man for all his courses, suggested contacting Muirfield.

McBride began as seasonal labor. He was eventually hired on full-time and then sent to school at Rutgers. He would work in the summer and go to school in the winter while his wife remained behind in Columbus. "It was tough on us. But I came back, got the assistant's job and worked my way up. It was definitely a different avenue, but everything's worked out."

He has been superintendent for two years now. And he now has his job and his life in a clear perspective.

"The attention to this golf course and the importance of the (Memorial) Tournament, really comes from the top (Nicklaus). That's my job, to try to keep him happy. It's his baby.

"It may be 99.9 percent perfect but that's not good enough. It has to be better than that. That's why it is what it is. He won't settle for anything less than that. As long as we have the people, the resources, the funds, we're always doing something. If you have all that, there's no reason why it shouldn't be perfect. That's what makes it challenging for me."

McBride seems a natural for his job, relying as much on instinct as on pure facts to make proper decisions about managing the course and its staff. He willingly accepts these challenges.

"You work your way to be Number One as far as course condition. But once you get up to the Number One spot, trying to maintain that spot is the most difficult because there are hundreds of great golf courses that all want to have that recognition.

"When you've been publicly recognized as the best that puts a little more challenge into the job of keeping it the best year in and year out. That's what I try to instill in these 40 to 50 people, and they understand that. They'll put in that extra effort because they have a lot of pride in it."

So does McBride. There's no where else he'd rather work, and with good reason. "If you feel you're at the best golf course, where else would you want to go?"

Perhaps the first tee? —*Jeff Sobul*

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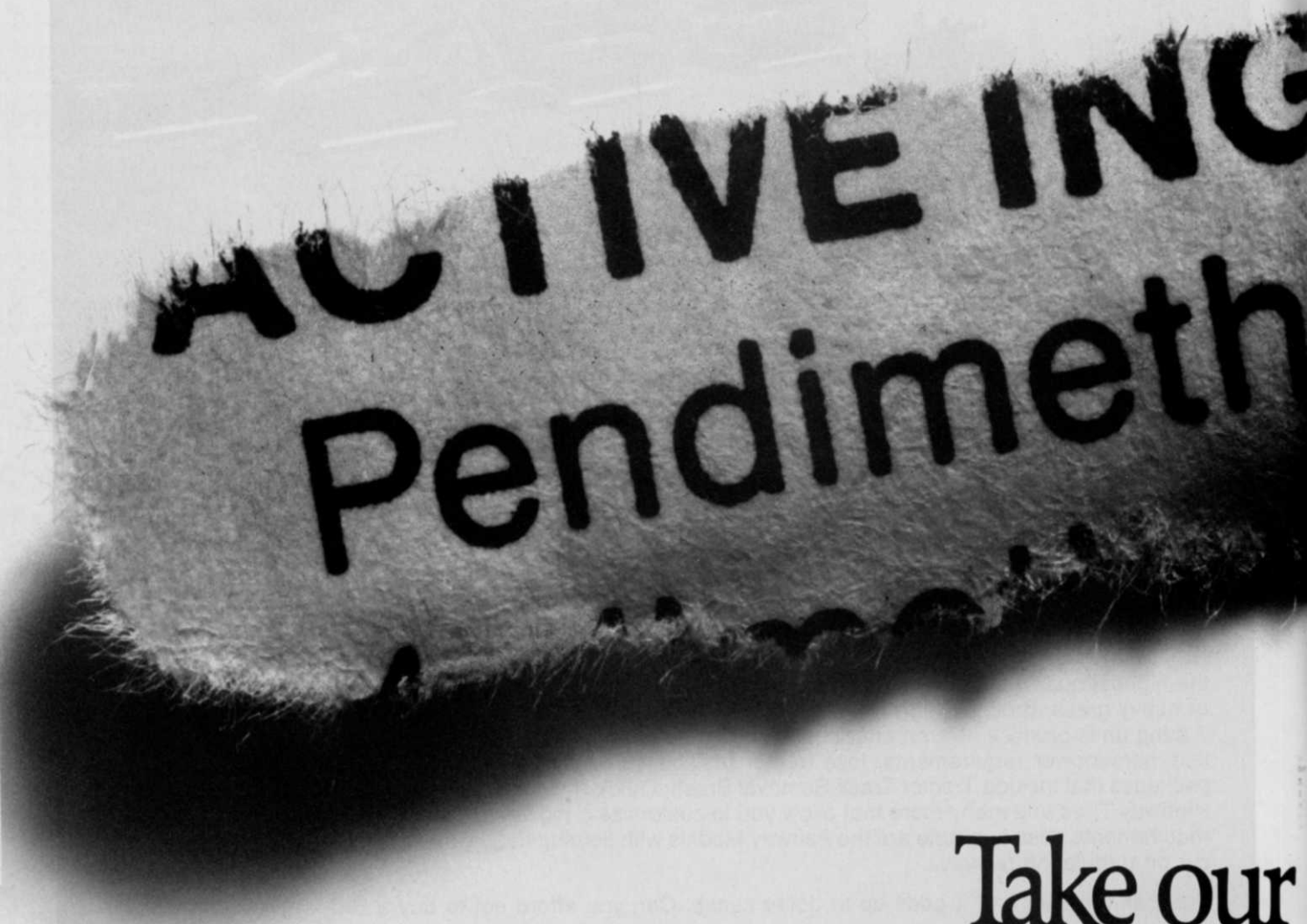

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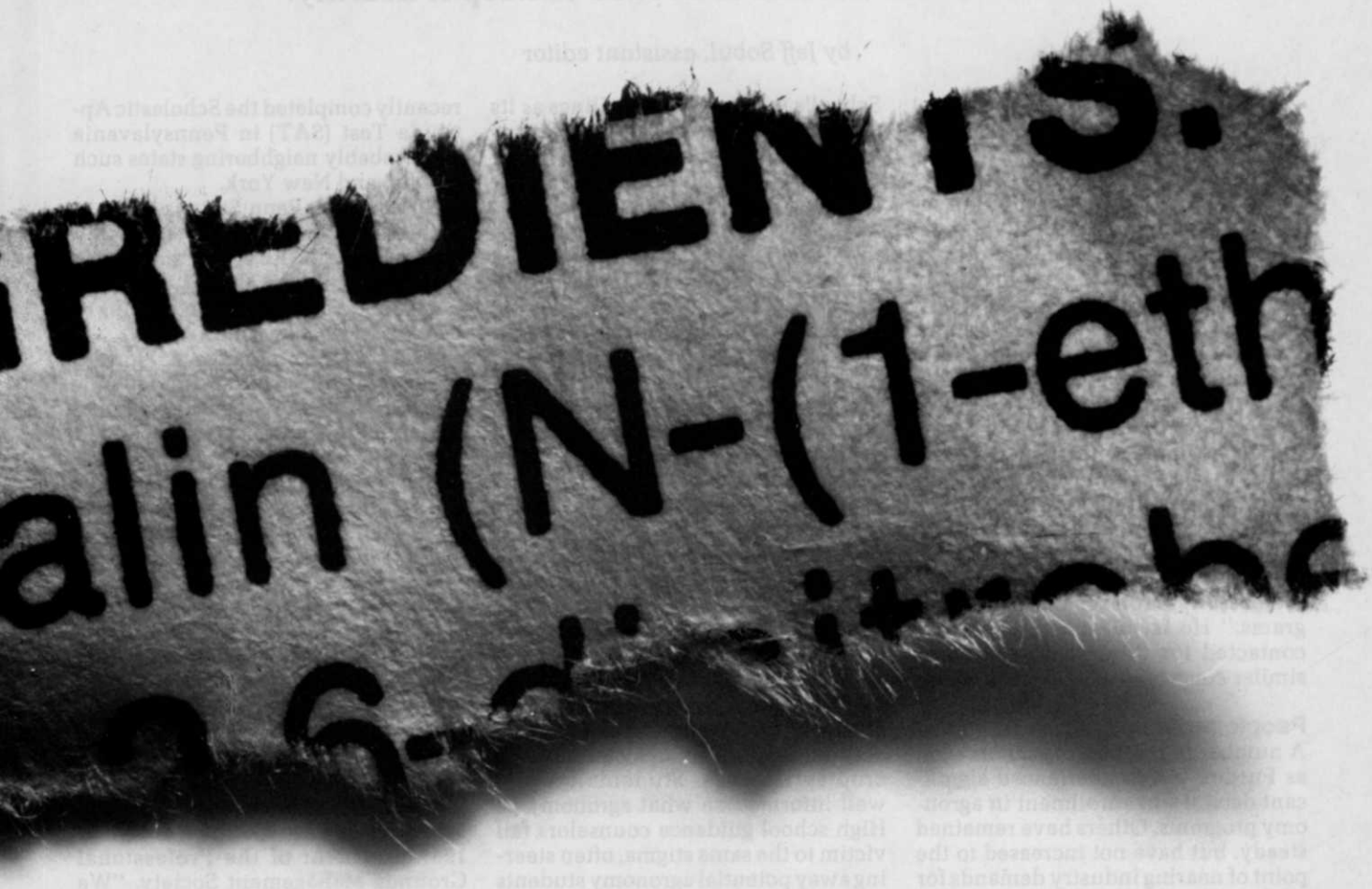

word for it.

annua. Hard-to-control broadleaf species like oxalis and spurge are also eliminated with the same rate.

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A GOOD ROOT FEEDING

Yes, the green industry remains strong as 1987 ends. But a good diet of education all around is needed to keep it healthy.

by Jeff Sobul, assistant editor

As the green industry closes out a dynamic year, it becomes obvious that education is needed.

Education not only within the industry, but for the public, the customer and potential customer.

The healthiest segment of the green industry remains the golf course segment. "I've never seen as many golf courses being built or reconstruction jobs done," says Gerald Faubel, superintendent at Saginaw (Mich.) Country Club. "It's wonderful to be associated with such a growth industry." (For more on the golf course boom, watch for a special section next month.)

There is, however, a flip side to this growth, Faubel notes. "I've seen no increase in students in university programs." He is not alone. Everyone contacted for this report expressed similar concerns.

People problems

A number of prominent schools such as Purdue have experienced significant declines in enrollment in agronomy programs. Others have remained steady, but have not increased to the point of nearing industry demands for graduates.

John Street, Ph.D. at Ohio State University, reports 110 students enrolled in agronomy, an increase of five from last year. Fifty of them are in turfgrass management. "This (enrollment) is pretty good considering other schools are down," he adds.

The Agronomy Department uses a strong state show (2,000+ attendees from 35 states) and the Agriculture School's informational mailings as its chief methods of spreading information.

Penn State University is in a similar situation. Tom Watschke, Ph.D., has seen no increase in agronomy enrollment, with about half of the 38 students in the program studying turfgrass management.

Watschke says he would like to see about 150 students in agronomy, with the same 50/50 ratio of turf to nonturf. By his estimation, the program could place about 20 graduates a year—more this year, he says, if the grads were there. "There are barely, if ever, enough graduates to meet industry demand," he says.

Graduate students generally range from four to six. This year there are seven.

Why the shortfall of students? Education. "The opportunities are not being delivered to the high school students," Watschke says. He feels part of this is a stigma attached to agronomy because of its association with crop agriculture. Students are not well-informed on what agronomy is. High school guidance counselors fall victim to the same stigma, often steering away potential agronomy students because of it.

Richard Akerman of Oregon Landscape Maintenance echos this sentiment. "The industry is not perceived as glamorous or well-paying," he notes.

Watschke says university and college programs need exposure and visibility at the high school level. Part of Penn State's information program is a new brochure mailed to students who recently completed the Scholastic Aptitude Test (SAT) in Pennsylavania and probably neighboring states such as Ohio and New York.

In addition, Penn State is going to increase the activity of its agronomy alumni now in the green industry—between 1,200 and 1,500. "We know our course of action and we're going to take it," Watschke states.

Marvin Gross of Sarasota, Florida-based Marvin's Garden and Landscaping Service also sees the shortage. "There is a need for skilled, trained managers and sub-managers in the landscape industry," he says. With the public putting a greater emphasis on harder-to-maintain native ornamentals in landscapes, he notes there is a need for "more schools putting out better people." The industry needs to make employment opportunities more attractive, highlighting management and training opportunities, Akerman adds.

"Industry organizations should combine to promote, encourage and market careers in the industry," says Jeff Bourne, chief of the Bureau of Parks in Howard County, Md., and 1987 president of the Professional Grounds Management Society. "We must look to the future, to the foundation of the industry. Self-preservation of these organizations is a basic reason."

Some indications show that relief from the small graduate pool may be in store. Akerman reports that freshman enrollments in horticulture-related majors in northwest colleges, mainly Oregon State and Washington State, increased this year by 25 per-

Jeff Bourne: Contractors will diversify

Ron Kujawa: Mount public relations campaign.

John Street: Enrollment is up some at OSU.

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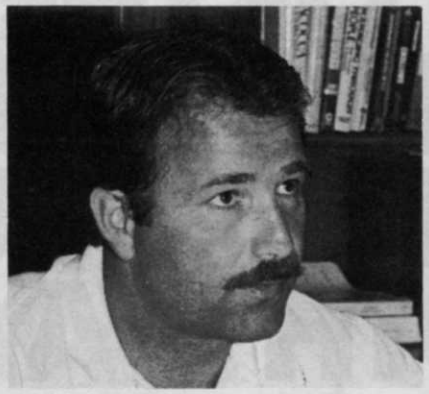
Eliot Maras: Local media is positive



Rich Akerman: Perceptions aren't glamourous

Tom Watchke: Programs need exposure

cent. Whether that increase is still reflected four years from now remains to be seen.

More PR?

The rest of the green industry needs to take the example set by the Professional Lawn Care Association of America with its recent campaign to beat back negativism directed at the industry.

Elliot Maras, editor of *Lawn Care Industry* magazine, notes that the PLCAA ran a sophisticated national public relations campaign which offset much of the negative publicity the industry was receiving as a result of attacks on 2-4,D and other chemicals.

"Local media ran more favorable articles and the national media did nothing, which was an improvement over the negativism of last year," Maras says.

He adds that as part of the campaign, education of existing customers also helped retain business. With the campaign, "existing customers put more creedence in what LCOs were doing, not in negative media."

Ron Kujawa of KEI Enterprises feels the entire green industry should band together in an effort such as the PLCAA's, mounting one public relations campaign a year to battle such issues as unfavorable pesticide legislation or tax laws.

"We have to have ways of surviving," he states. "Get together as one voice. One guy writing doesn't mean a thing. A thousand, that's different." He calls on the major industry organizations to mobilize their members for such an effort, perhaps for a period of just one or two months a year, deluging Congress with letters and working to get favorable press.

Labor pains

The labor pool overall seems down in the green industry, partly because of the new federal immigration laws, partly because unemployment is down.

Immigration laws have affected the South Central region (Texas) and west into California the most.

David Marsh of Industrial Landscape Service in San Jose, Calif., says the labor pool is a chief concern in the West. Marsh, who is Region 2 director of the Associated Landscape Contractors of America, says "there used to be two or three people outside in the (company's) yard every day looking for work. They're not there anymore."

He notes the biggest effect is on larger businesses, which can't afford to try and skirt the new law. Smaller businesses, however, have an advantage because the law is harder to enforce on them. Marsh adds that many industries now are competing for the same reduced labor.

With unemployment down nationwide, Akerman notes, there is a smaller pool of employable people without jobs to hire seasonally; a double-edged sword if there ever was one.

Business sense

As with most businesses or industries, the health of the green industry is dependent on that of the U.S. economy.

Now things are going well, though the day most of the people were contacted for this report, the Dow Jones Industrial Average had just dropped 500 points.

But the industry is still attractive to outside investment. The lawn care industry can attest to this. It has consolidated extensively in the last year through takeovers such as Ecolab's purchase of ChemLawn and Waste Management's purchase of Tru Green (see LANDSCAPE MANAGEMENT November, 1987).

Though lawn care market growth has slowed some, it remains at a healthy 15 to 18 percent annually, down from a high of 25 percent. Maras says this is a result of market saturation and not negativism, though.

Even with a downturn in the economy, the green industry generally isn't affected for at least six to 12 months, when housing starts are completed and new starts slow.

This reaction time should be used wisely, Bourne notes. A lot of contractors, he feels, will be looking to diversify their services, such as a design/install contractor adding maintenance as a service. Akerman sees LCOs adding lawn maintenance as well.

A result of this is a greater need for business skills, Akerman adds. He says ALCA has begun a management seminar series to address this. Also, looking at the schedule for most state shows, management sessions are becoming more and more common.

Akerman says this increased awareness is something that has been going on most of the decade. "Without it, the industry would not have grown as it has in the last five years."

Industry growth has had a few unpleasant outgrowths as a result. Doug Fender, executive director of the American Sod Producers Association, has seen a lot of "me-too" entries into the sod market, people not sure what they're getting into, and worst of all, not sure what they're doing. "It's dangerous for them and the people in that immediate area," he says, with poor quality product being produced. "The long-term effect is negative in many cases for the professional sod market."

Contractors share similar concerns. Bourne terms them "Midnight Gypsies:" someone with a pickup truck, a lawn mower and a rake who calls himself a contractor. Bourne hopes that professional organizations can establish professional standards: quality—not quantity—for price.

For the most part, though, the quality is there, and the growth is continuing, though maybe a little slower. However, Kujawa summarizes, "if the whole economy goes to hell then we just suffer. We can't do anything about it. But as long as the economy is good, we can adapt."

So start adapting. **LM**

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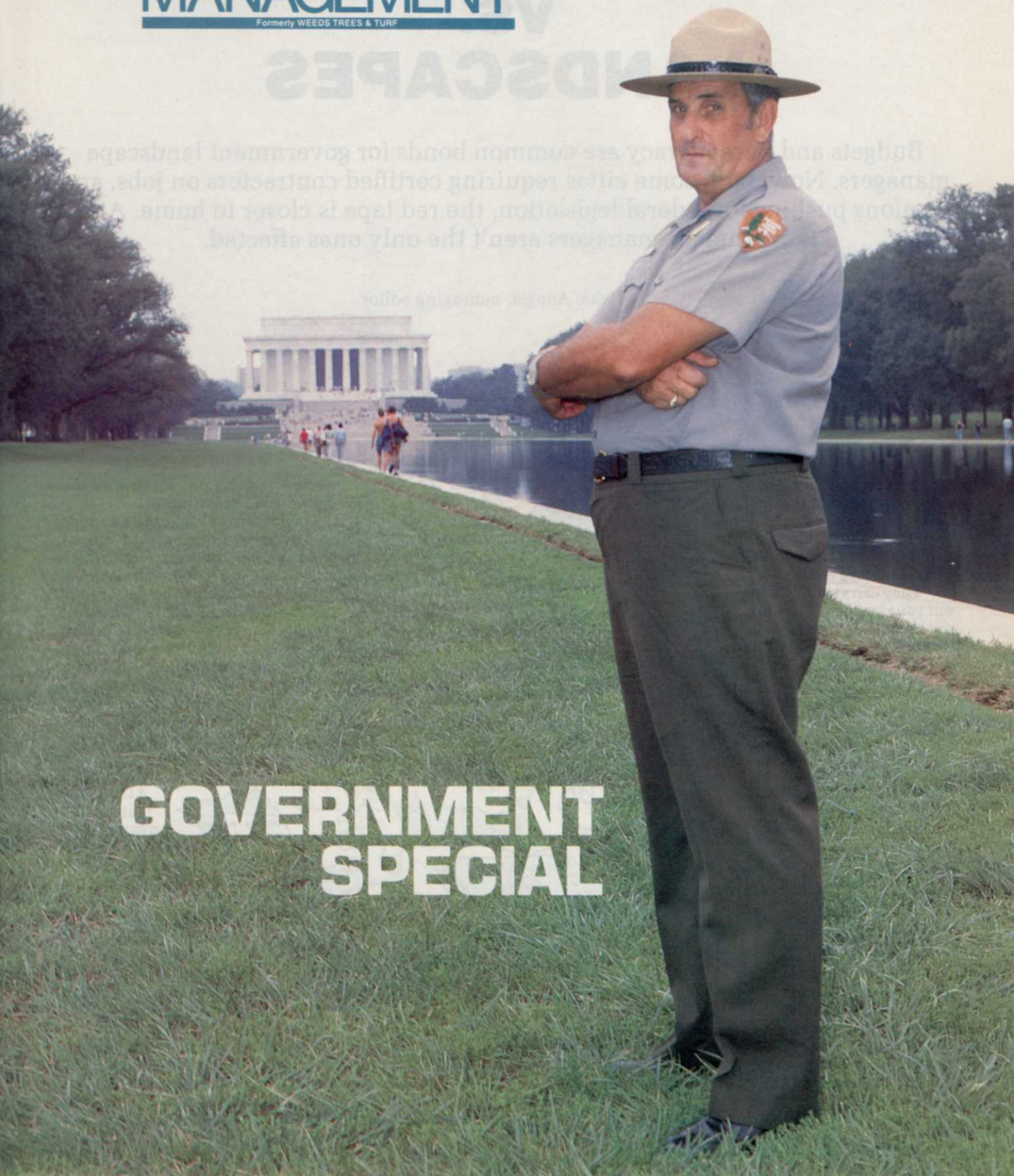
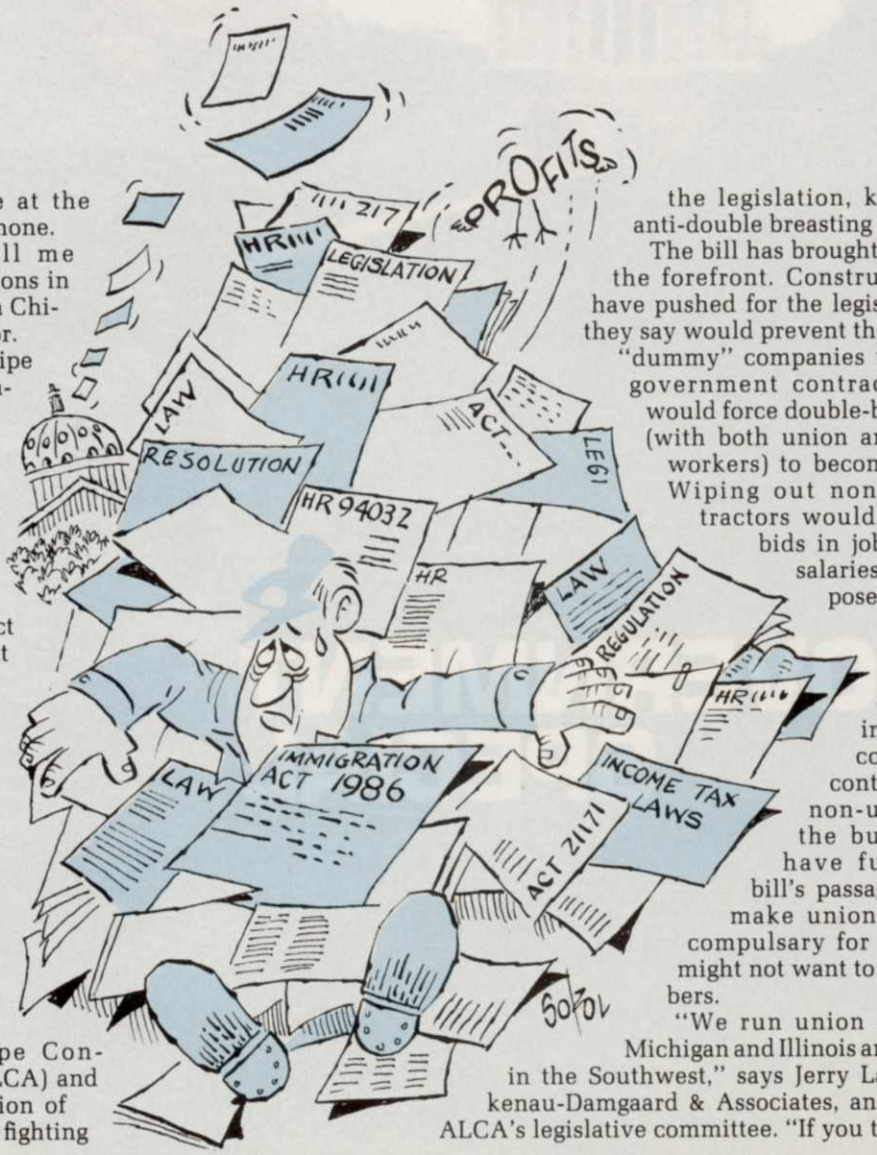


GOVERNMENT SPECIAL

LEGISLATION vs. LANDSCAPES

Budgets and bureaucracy are common bonds for government landscape managers. Now, with some cities requiring certified contractors on jobs, and unions pushing for federal legislation, the red tape is closer to home. And government managers aren't the only ones affected.

by Heide Aungst, managing editor



There was silence at the other end of the phone.

"Can you tell me something about the unions in Chicago?" I repeated to a Chicago landscape contractor.

"They can virtually wipe out your business," he answered hesitantly. "That's an extremely touchy subject for this area, and we're at peace with them now."

Unions are a part of the green industry that's rarely been subject to debate. The fact is that some landscape contractors are unionized, some aren't, and some companies are both. But new legislation which passed the House in June (vote: 227-197) could force companies which have both union and open shops to become union or go out of business. Green industry associations such as the Associated Landscape Contractors of America (ALCA) and the American Association of Nurserymen (AAN) are fighting the legislation, known as the anti-double breasting bill.

The bill has brought the debate to the forefront. Construction unions have pushed for the legislation, which they say would prevent the formation of "dummy" companies to get around government contracts. The bill would force double-breasted shops (with both union and non-union workers) to become unionized. Wiping out non-union contractors would force higher bids in jobs and higher salaries, say those opposed.

AAN and ALCA say that forcing companies into unions will cost companies contracts that the non-union side of the business could have fulfilled. The bill's passage also would make union membership compulsary for workers who might not want to become members.

"We run union operations in Michigan and Illinois and a non-union in the Southwest," says Jerry Lankenau, Lankenau-Damgaard & Associates, and chairman of ALCA's legislative committee. "If you talk in terms of

discipline, there's no comparison between the non-union crew in our trade and the union crew. The stronger the union, the less productivity."

If the Senate passes the bill, it is expected that President Reagan will veto it, says Ben Bolusky, AAN director of governmental affairs.

Government unions

The legislation does not affect unionized landscape crews at government agencies. "There's a federal union here, but it's an option to join," says Ed Chmielewski, transportation/grounds foreman for the Cleveland Veterans Administration Hospital. "There's really no advantage to joining it." Chmielewski says he sees little difference on productivity levels of union or non-union workers.

Roadside developer Charles Gouveia says his landscapers at the Illinois Department of Transportation belong to unions. Most contracted highway jobs also go to unions, as is mandated by the use of federal funds.

"We don't always get quality work," Gouveia says. "Most of our people are teamsters who do a variety of things. Landscape maintenance is almost non-existent, so we design that way."

But, Gouveia says, things are better than they used to be. "Our workers used to virtually change with party changes," he says. "Now you get career people who will go through training and get licensed."

State certification/licensing

"The unions have not done this industry a favor," says Ken Gerlak of Contra Costa Landscaping in Martinas, Calif. The California union put a stop to an apprenticeship program the California Landscape Contractors Association (CLCA) tried to initiate several years ago.

Ironically, disbanding the apprenticeship program gave CLCA more time to get its certification program off the ground. Since the program began in 1983, 117 contractors have become "certified landscape technicians (CLT)."

California requires all landscape contractors to be licensed. But certification is more involved. "Licensing requires the landscape contractor to know California laws and business laws, and to have a certain amount of knowledge of the field," Gerlak explains, "but it does not test people hands-on."

To become a CLT, the applicant must have a minimum 4,000 hours of work in the field and must perform a series of tasks including installing an irrigation system, planting trees and shrubs, seeding, sodding, pouring concrete and running a tractor. Two cities in northern California now require public works jobs to be done by CLTs.

Greater Vahejo, a city with a population of about 150,000, passed a law this year requiring a landscape technician to be in charge during the installation of landscaping and irrigation. Fairfield is just starting similar regulations.

"I just think cities are tired of having unqualified people work on contracts," Gerlak says.

Landscaping costs shouldn't be affected by the trend. "The union rate is about $20 an hour, while a CLT might make between $12-$14," Gerlak says.

Martha Bradford, communications specialist at ALCA, says the issue of certification for contractors is divided among members. "Some people think certification is an added benefit that helps improve the image of landscape contractors," she says. "Others feel it doesn't buy you that much. What we need to do is study the issue more."

Lankenau is one ALCA member who's against certification. "If a young man or woman passes a driver's test, it doesn't stop him or her from speeding or driving drunk," he says.

But states and associations are implementing more certification programs.

The Professional Grounds Management Society (PGMS) started a program in 1982, but, so far, only 18 people have qualified for certification. The program requires applicants to have a combination of eight years education and experience, with several years in a supervisory capacity. Although the PGMS program is open nationally to members or non-members, many state landscape associations are starting their own programs to stave off government involvement.

Arizona is such a state. The first qualified participants were certified in November through a program started by the University of Arizona and three state associations.

"With landscape professionals training individuals, you can be more positive about getting people to classes. There's no coercion," says Paul Bessey, Ph.D. at the University of Arizona.

Participants go through six bimonthly, day-long training sessions. Then they must pass a written exam and a hands-on test, which includes calibrating spreaders, repairing equipment, and identifying diseases.

Participants have included both government and private industry workers says Terry Mikel, extension agent. But both Bessey and Mikel say that, in the long run, the consumer benefits most from certification programs.

Federal legislation affecting landscape contractors

Anti-double breasting bill: H.R. 281/S. 492 would force double-breasted shops (with both union and non-union workers) to become unionized. Wiping out non-union contractors would force higher bids in jobs and higher salaries, say opponents. AAN and ALCA say that forcing companies into unions could cost companies contracts, which the non-union side of the business could have fulfilled. Passage of the bill also would make union membership compulsary for workers who might not want to become members.

Minimum wage bill: H.R. 1834/S. 837 would require the minimum wage to increase from $3.35 an hour to $4.65 an hour by Jan. 1, 1990.

Minimum health insurance bill: H.R. 2508/S. 1265 would require companies to carry health insurance for all employees who work 17 ½ hours a week or more.

Parental/medical leave bill: H.R.925/H.R. 284/S.249 would require 10 weeks parental or 15 weeks medical leave within two years for all employees at companies with 50 employees (dropping to 35 employees after three years). Employees qualify after one year of service.

High Risk Notification Act: H.R. 162/S. 79 states that if a population of workers has a 30 percent or higher risk than normal on the job for contracting a disease, the workers must be notified. ALCA and AAN say this will likely apply to landscapers' use of pesticides. The bill would require an employer to move a worker to another job at the same wage and benefits. If no such job exists, the employee can leave the job and still collect the wage and benefits for a year. The employer would be forced to pay all medical monitoring and tests for any workers falling in high-risk catagories.

Still, neither likes the idea of state government regulating such programs. "I personally don't want anything to do with regulatory programs," Mikel says.

Playing politics

States have long regulated pesticide applicators. Few landscape managers disagree with the purpose behind such safety measures, even though it varies between states.

"Under California law, every worker is under the blanket of my license," says Mark Hodnick, landscape supervisor at Cal-Poly Pomona. "That way, they make sure I stay on top of things."

Cities are now cracking down on landscape managers by passing laws.

"Anytime you're dealing in a government situation, you're dealing with politics," says Mark Eynatten, assistant director of parks and recreation for Coral Springs, Fla. "Specific interest groups impact on what you're able to do. Sometimes you have to change your priorities on a minute-to-minute basis."

Coral Springs is a planned community, which means landscaping laws are strict. "We impose strict guidelines on developers," Eynatten says. "As a result, we have to comply with the same level of landscaping." For example, he says, the city law states that parking lots must have a complete landscaped island every 40 feet.

Federal legislation

EPA laws aside, the federal government rarely gets involved in laws written directly to the landscape industry. But 1987 has seen the introduction of labor legislation which ALCA and AAN says will hurt the green industry.

'We're not crying wolf; these are real threats when totalled all up.'

—Ben Bolusky

The minimum wage bill, the minimum health insurance bill, and the parental/medical leave bill would escalate the cost of running a company, possibly closing down some small businesses.

"Labor-related issues affect all parts of the industry," Bolusky says. "We're not crying wolf; these are real threats when totalled all up."

A fourth piece of legislation currently before Congress, like the anti-double breasting bill, affects the landscape industry more closely. Bolusky says the High Risk Notification Act steps on state and community right-to-know laws, the OSHA Hazard Communication Standards (which go into effect in 1988), and the Farm Worker's Protection Standards (which fall under the EPA and FIFRA). "No one can argue that we've got to protect our workers, but one arm of the government doesn't know what the other arm is doing," he says.

Can so many laws be good for an industry?

"I would much prefer that we police ourselves than have the government involved," says PGMS executive director Allan Shulder.

The battle between legislation and the landscape will take organized efforts among professional industry groups to fight off excessive regulations.

Belosky offers simple advice: "Write your representative." **LM**

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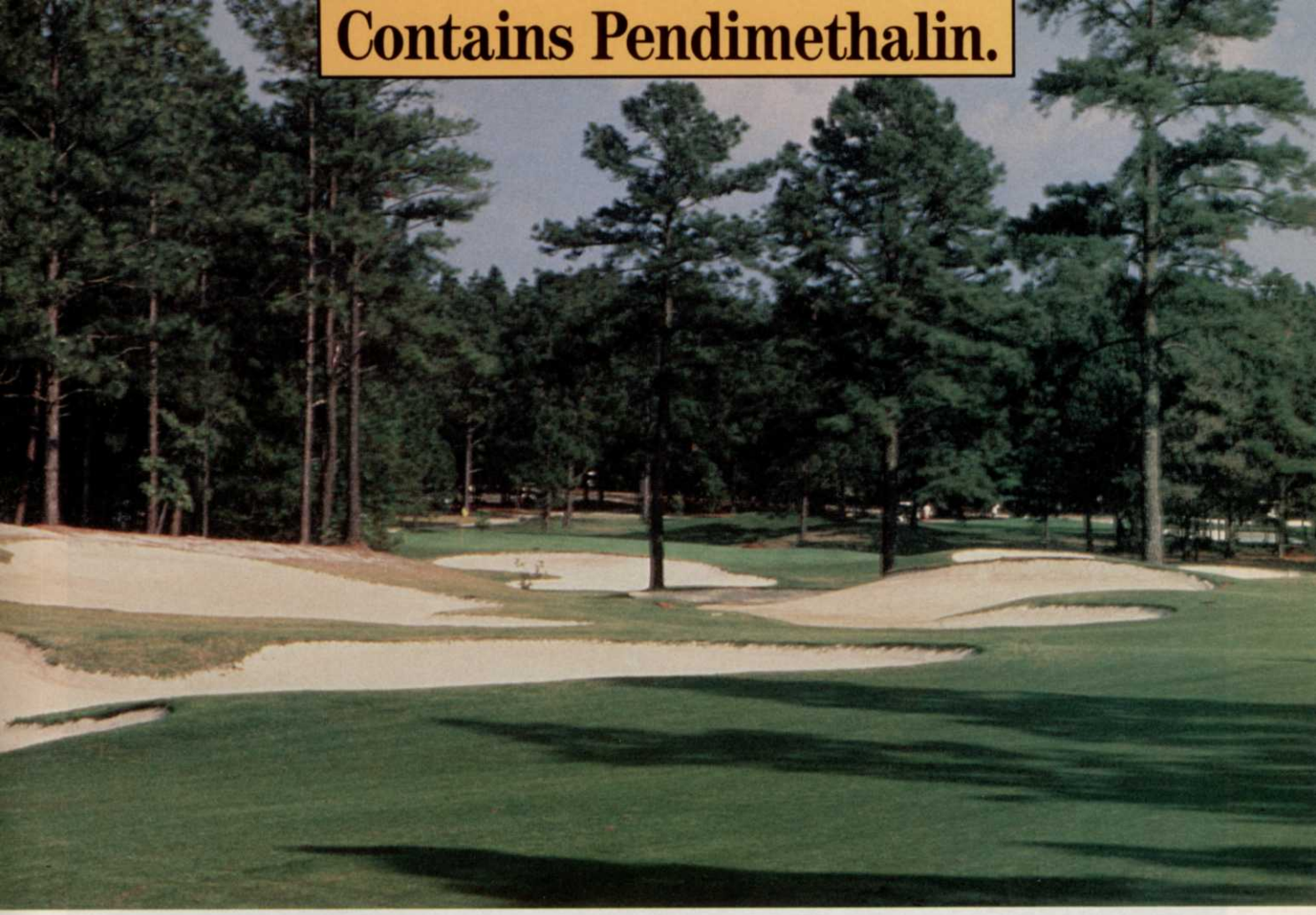

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The view out the window of the Washington Monument shows the White House and land managed by the National Park Service.

A CAPITAL IDEA

The National Park Service isn't limited to vast expanses of Yosemite and Yellowstone. In the nation's capital, the park service captures nature's highlights in limited spaces through design and management.

by Heide Aungst, managing editor

It was all perfect. The building of the Vietnam Memorial went like clockwork. The site was newly sodded. The turf was watered and primed for the dedication: November 11, 1984.

Only one thing went wrong: 400,000 people showed up. An overwhelming number, which no one had planned on.

Within less than eight hours, it was mud. No turf remained. Just mud.

"The big fallacy was that we sodded just two weeks before dedication," says Jim Patterson, research agronomist with the National Park Service (NPS).

Because of the projected wheelchair traffic, the NPS laid the sod with Enkamat on top of the existing soil mixed with sewage compost. "The soil was tightly compacted into the matrix of the Enkamat," says John Short, NPS soil scientist.

The memorial is now the number-one visited park in the country. Traffic to the monument can still be as high as 13,000 people a day. But walkways have been gradually expanded. After researching the problem, the park service renovated the soil to a 3/4 construction sand 1/4 soil mix. The area was re-sodded with more wear-tolerant bluegrass.

Solving problems such as turf management around the monuments is a big part of the NPS employees' job.

A monumental job

Mel Oldle has worked for the park service for 30 years and has been chief of grounds and trees for the past

Landscape manager Mel Oldle oversees tree pruning in front of the Washington Monument.

seven. Oldle oversees 98 people to manage 104 acres of monument grounds and 46 acres on Capital Mall. In fact, 23 percent of the land within Washington D.C. is in park service jurisdiction.

To be more exact, the park service in the National Capitol Region oversees 62,000 acres of park land, 447 miles of roadways, 846 acres of roadsides and 717 miles of trails.

Oldle says the hardest part of his job is keeping the turf cut and picking up trash left by more than 26 million visitors each year.

That kind of traffic on the grounds causes severe compaction problems. To help alleviate the problem, the crew aerates four times a year, twice in the fall, twice in the spring, in two directions.

Constant traffic on the turf also makes the area ideal to test wear tolerance of turf varieties. A trained eye looking out of the Washington Monument will notice turf plots on the monument grounds for the National Bluegrass tests.

The crew mows an average of once a week at 2½ inches. In the heat of the summer, Oldle cuts back to every other week and raises the height of cut to three inches.

Much of the monument grounds is not irrigated, although future plans call for the installation of a quick-coupler system.

Although Oldle says his landscape management job isn't out of the ordinary, the sheer quantity of products used is rare.

In 1986, the National Capital Region park service used 23 tons of dry fertilizer, most of it a 16-8-8 mix, and 10,125 gallons of liquid fertilizer. They used 200 cubic yards of topsoil, 600 cubic yards of mulch and 10½ tons of lime. They used 3,000 square yards of sod and 27,700 pounds of turfseed. Most of the seed used, 9,000 pounds to be exact, is K-31 tall fescue, which Patterson says "has been our workforce for 20 years." Other varieties used include Monopoly, A-34 and Merit Kentucky bluegrass; Palmer and Regal perennial ryegrass; and Falcon tall fescue.

A trained eye looking out of the Washington Monument will notice turf plots on the monument grounds for the National Bluegrass tests.

The park service plants an average of 143,720 tulip bulbs; 22,228 daffodils; and 71,369 annuals. In 1986, they planted 235 trees and removed 42; they planted 2,449 shrubs, while removing 2,199 shrubs.

But Washington's landscape is more involved than just the complex management of it. Much relies on the original design.

Modern plans

NPS designers and landscape architects review all documents before altering any part of the Washington landscape under park service jurisdiction.

"The first thing I do is file research," says Mike Donnelly, regional planning coordinator. "I try to understand the evolution this part of the grounds has gone through over time."

Donnelly has been involved in redesigning the Washington Monument grounds. "You have to ask what did the original designers have in mind? And, what's going on out there now?" Donnelly says. "None of the original designers recognized the Washington Monument as part of the Mall."

One re-design plan was approved in 1982; with that, two sidewalks were built to eliminate turf traffic. But by 1986, some of the plans had been disapproved, taking Donnelly back to square one.

Design management

While Donelly is responsible for large-scale design plans, NPS landscape architects design specific areas and work closely with landscape managers. Areas around the national capital region are divided into natural, cultural and historic development zones.

"In natural areas, it's established policy that only native and local plant material can be used," says landscape architect Darwina Neal. Some historic parks can only use plant materials which were available at the time of construction; no improved varieties can be used.

Once an area is designed, Neal may turn to researchers for advice on varieties to use. The park service's Center For Urban Ecology houses researchers in agronomy, soil, entomology and related fields.

Tackling the problems

One of the biggest problems in the National Capital Region, Short says, is the soil. He has giant core samples mounted on the walls of his laboratory, much of it looking more like a dump than a park soil. But the key to his job and that of other researchers at the center is to find solutions.

"With some sites we'll use what exists, some we'll modify and some

we'll replace," Short says. "For whatever the landscape architect deems necessary, we try to engineer a soil system site by site."

Engineering a soil system may mean adding lightweight aggregate such as Turface.

In 1986, the National Capital Region used 46 tons of Turface, and had used 178 tons the year before. But while the National Park Service continues to purchase large quantities of some products, one thing they've cut back on is pesticides.

In 1979, the National Capitol Region implemented an integrated pest management (IPM) program. "Nothing gets sprayed just in case, anymore," says Carol DiSalvo, IPM specialist/entomologist. "You have to prove (insect infestation) is at a level that's intolerable."

IPM is a system of monitoring and controlling pest populations whether it's insects, weeds or disease. To control beetle infestation in elms, DiSalvo has set 99 traps on trees throughout the capital region. The traps are sheets of paper coated with a substance containing pheromone bait. They are put on trees other than elm, to draw the disease-carrying *Scolytus multistriatus* beetle away from the elms.

Entomologist Carol DiSalvo checks a beetle trap as part of the park service's I.P.M. program.

Every elm has been numbered and has a history on file to monitor closely for Dutch Elm Disease. If the disease is found, the tree will be treated with a fungicide, or cut down if it might spread. The park service has found a nursery which will supply American elms and is confident that with the IPM program, they will be able to plant more elms.

Besides elms, the park service has started an ornamental cherry tree donation program called "Blossoms in Our Future." They estimate only 500 of the current 3,000 cherry trees are from the original planting. In 1987, 66 new cherries were donated.

"The biggest change I've seen is the increase in cherry trees," Oldle says. "The number of trees has almost doubled in the past 15 years."

The trees, along with design and management programs, keeps the nation's capital a beautiful place to live or visit.

"I travel to a lot of other cities," Patterson says, "but I still think Washington is the most beautiful city. And a lot of the credit belongs to Mel Oldle and the other people who work here." **LM**

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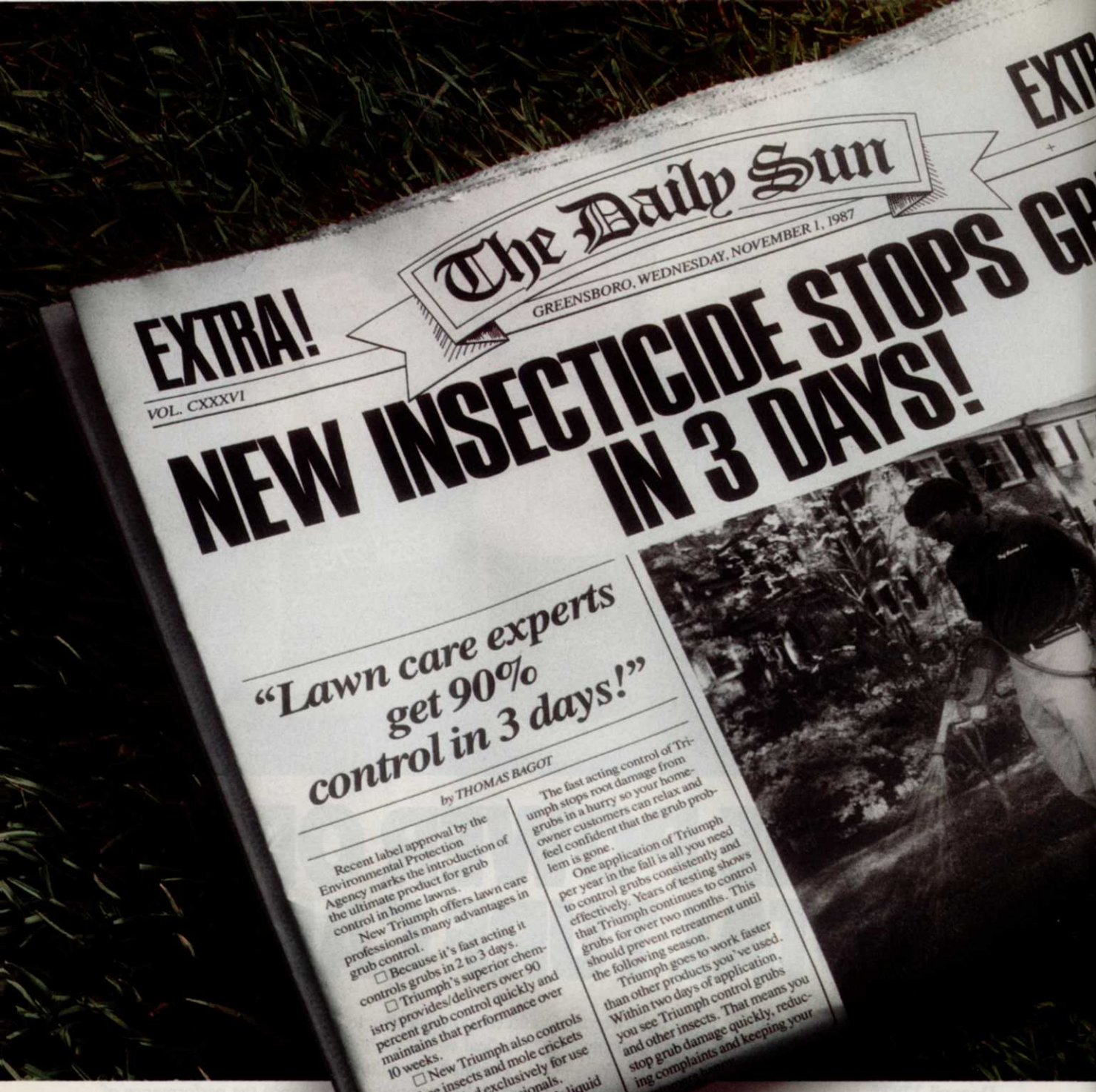
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by THOMAS BAGOT
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TURF CALENDAR

JANUARY

3-5—Kansas Association of Nurserymen Winter Meeting. Kansas City, MO. Contact: John Tonkin, 5530 W. 19th St., Topeka, KS 66604; (913) 272-6437.

4-6—Maryland Turfgrass '88. Maryland Turfgrass Council. Festival Hall, Baltimore, MD. Contact: Cheryl A. Gaultney, P.O. Box 223, White Marsh, MD 21162; (301) 335-3700 or Dr. Thomas Turner, Dept. of Agronomy, University of Maryland, College Park, MD 20742; (301) 454-3716.

4-8—Mississippi Turfgrass Short Course. Bost Extension Center, Mississippi State, MS. Contact: G. Euel Coats, MTA, P.O. Drawer PG, Mississippi State, MS 39762; (601) 325-3138.

5-7—Illinois Landscape Contractors Association Winter Design Seminar. Oak Meadows Country Club, Addison, IL. Contact: Pat Cassady, 2200 S. Main St., Lombard, IL 60134; (312) 932-8443.

5-7—Indiana Association of Nurserymen Annual Winter Conference. Adam's Mark Hotel, Indianapolis, IN. Contact: Philip Carpenter, 202E 650N, West Lafayette, IN 47906; (317) 497-1100.

5-8—Eastern Regional Nurserymen's Association Annual Convention and Trade Show. Concord Resort Hotel, Kiamesha Lake, NY. Contact: Larry Carville, 24 West Rd., Suite 53, Vernon, CT 06066; (203) 872-2095.

6-8—26th Annual North Carolina Turfgrass Conference & Exhibit. Winston-Salem, NC. Contact: A.H. Bruneau, Box 7620. NC State, Raleigh, NC 27695-7620; (919) 737-2326 or R.H. Robertson, P.O. Box 5395, Cary, NC 27511; (919) 467-1162.

6-8—42nd Annual Meeting, Northeastern Weed Science Society. Sheraton Hartford Hotel, Hartford, CT. Contact: Richard A. Ashley, Dept. of Plant Science, U-67, University of Connecticut, Storrs, CT 06268; (203) 486-3435.

6-9—Grower Expo '88. Pheasant Run Resort, St. Charles, IL. Contact: Kathy Wootton, P.O. Box 501, West Chicago, IL 60185; (312) 293-5020.

7—New York State Nurserymen's Association Annual Meeting. Concord Hotel, Kiamesha Lake, NY. Contact: Margaret Herbst, 310 Madison Ave., New York, NY 10017; (212) 697-2752.

7, 14, 21—Topics In Landscape Management. Loree Building, Cook College, Rutgers University New Brunswick NJ. Contact: Jim Morris, (201) 932-9721.

7-8—1988 New Hampshire Turf Conference. The Center of New Hampshire Holiday Inn, Manchester, NH. Contact: Dr. John R. Roberts, Dept. of Plant Science, Nesmith Hall, UNH, Durham, NH 03824-3597; (603) 862-3202 or Mark Taylor, P.O. Box 250, Haverhill, MA 01830; (617) 374-0581.

7-8—Kentucky Shade Tree & Nurserymen's Annual Trade Show. Executive Inn West, Louisville, KY. Contact: Larry Lose, 10105 After Rd., Louisville, KY; (502) 245-4036 or Lee Squires, 701 Baxter Ave., Louisville, KY 40204; (502) 451-5630.

7-9—Washington State Nurserymen's Association Annual Convention. Towne Plaza Hotel, Yakima, WA. Contact: Margaret Schlosser, WSNA, P.O. Box 670, Sumner, WA 98390; (206) 863-4482.

9-10—LAN-MNA Educational Winter Seminar. Coliseum Ramada Inn, Jackson, MS. Contact: David Tatum, P.O. Box 5207, Mississippi State, MS 39762; (601) 325-7771.

10-14—Advanced Landscape Plant I.P.M. Short Course. Entomology Department, University of Maryland, College Park, MD. Contact: Dr. John Davidson, Entomology Dept., University of Maryland, College Park, MD 20742; (301) 454-7121.

10-12—Minnesota Nurserymen's Annual Convention & Trade Show. Hyatt Regency Hotel, Minneapolis, MN. Contact: Jim & Gen McCarthy or Larry Pfarr, P.O. Box 13307, St. Paul, MN 55113; (612) 633-4987.

11-12—Associated Landscape Contractors of Massachusetts Short Course. Mass. Bay Community College, Wellesley, MA. Contact: Virginia Wood, 1357 Washington St., W. Newton, MA 02165; (617) 964-0452.

11-13—Mid-Atlantic Nurserymen's Trade Show. Baltimore, MD. Contact: Mid-Atlantic Nurserymen's Trade Show, P.O. Box 314, Perry Hall, MD 21128; (301) 256-6474.

11-14—Michigan Association of Nurserymen Annual Convention & Trade Show. Lansing, MI. Contact: Richard Seely, 500 N. Homer, Suite 201, Lansing, MI 48912; (517) 337-1796.

11-15—Cornell Turfgrass Short Course. Cornell University, Ithaca, NY. Contact: Joann Gruttadaurio 20 Plant Science Building, Cornell University, Ithaca, NY 14853; (607) 255-1792.

11-15—Advanced Technical Arboriculture Course. Washington, D.C. Contact: Dr. Tom Smiley or Dr. Ken Miller at (304) 876-6595 or (800) 622-2562.

12—Perennial Plant Selection and Design. Elyria, Ohio. Contact: Charles Behnke, Lorain County Cooperative Extension Service, 1575 Lowell St., Elyria, OH 44035; (216) 322-0127.

12-13—Rhode Island Nurserymen's Association Short Course and Annual Meeting. Sheraton Islander Inn, Newport, RI. Contact: Marlene Franklin, P.O. Box 99, Kingston, RI 02881; (401) 789-6481.

12-13—Tidewater Professional Horticulture Conference & Trade Show. Pavillion Conference Center, Virginia Beach, VA. Contact: Beth Wright, P.O. Box 6291, Virginia Beach, VA 23456.

12-14—Pacific Coast Nursery Industry Seminar. San Luis Obispo, CA. Contact: Elaine Thompson, 1419 21st St., Sacramento, CA 95814; (916) 448-2881 or (800) 752-6822 or Jack Wick, 1419 21st St., Sacramento, CA 95814; (916) 448-2881.

13-14—24th Annual North Carolina Irrigation Conference. McKimmon Center, North Carolina State University, Raleigh, NC. Contact: Ronald Sneed, Box 7625, NC. State University, Raleigh, NC 27685; (919) 737-2675.

13-15—Intermountain Horticultural Trade Show. Dixie Center, St. George, UT. Contact: George S. Hoar, 3500 S. 900 East, Salt Lake City, UT 84106; (801) 487-4131.

13-15—Eastern Pennsylvania Conference and Trade Show. Valley Forge Convention & Exhibit Center, King of Prussia, PA. Contact: Thomas Watschke, Department of Agronomy, 16 Tyson Building, University Park, PA 16802; (814) 863-1613.

14-15—Landscape Estimating Workshop. Akron, OH (other 1988 dates in cities including Dallas, Portland, Chicago, Washington D.C. & New York). Contact: Vander Kooi & Associates, P.O. Box 621414, Littleton, CO 80162; (303) 697-6467.

14-15—Rocky Mountain Regional Turf Conference. Lory Student Center, Colorado State University, Fort Collins, CO. Contact: Dr. K.M. Brink, Dept. of Horticulture, Colorado State University, Ft. Collins, CO 80523; (303) 491-7018.

14-16—Georgia-South Carolina Nursery Association Trade Show & Short Course. Civic Center, Savannah, GA. Contact: Jake Tringa, 190 Spring Tree Rd., Athens, GA 30602 or Sherry Phillips, 103 Layle Lane, Watkinsville, GA 30677; (404) 769-8255.

15-17—Arkansas Nurserymen's Association Annual Conference. Excelsior Hotel, Little Rock, AR. Contact: Jerry Russell, P.O. Box 55295, Little Rock, AR 72225; (501) 225-0029 or Faith Welshans, 11473 Southridge, Little Rock, AR 72225.

15-17—Florida World. Florida Foliage Association & Foliage Foundation. Orlando, FL. Contact: Ann King or Betty Briggs, P.O. Box 2208, Apopka, FL 32704; (305) 886-1036.

15-17—Mid-Am Horticulture Trade Show. Hyatt Regency, Chicago, IL. Contact: Donn W. Sanford, CAE 4300-L Lincoln Ave., Rolling Meadows, IL 60008; (312) 359-8160.

17-20—40th Annual California Weed Conference. Red Lion Inn, Sacramento, CA. Contact: Stanley Walton, P.O. Box 3021, El Macero, CA 95618; (916)756-0123.

18-20—58th Annual Michigan Turfgrass Conference. Clarion Convention Center, Lansing, MI. Contact: P.E. Rieke, Crop & Soil Sciences, Michigan State University, E. Lansing, MI 48824; (517) 355-0266 or M.T. McElroy, (517) 353-9022.

18-20—Cornell Turfgrass Short Course. Cornell University, Ithaca, NY. Contact: Joann Gruttadaurio 20 Plant Science Building, Cornell University, Ithaca, NY 14853; (607) 255-1792.

19—New York Professional Turf and Landscape Conference. Yonkers Raceway, Yonkers, NY. Contact: John Cockerill, 475 Central Ave., White Plains, NY 10606; (914) 428-6443.

19-20—Delaware Horticultural Industry Expo. Sheraton Inn, Dover, DE. Contact: Susan Barton, Townsend Hall, University of Delaware, Newark, DE 19717-1303; (302) 451-2532.

19-21—3rd Annual North Central Turfgrass Conference & Trade Show. Holiday Inn, Bismarck, ND. Contact: Kevin Stayton, Box 7262, Bismarck, ND 58502; (701) 224-1517.

19-21—Illinois Landscape Contractors Association Winter Business and Technical Seminar. Oak Meadow Country Club, Addison, Ill. Contact: Pat Cassady, 2200 S. Main St., Lombard, IL 60134; (312) 932-8443.

19-21—New Jersey Association of Nurserymen Annual Educational Session. Hyatt Regency, Princeton, NJ. Contact: S. Howard Davis, Building A, Suite 3, 65 S.

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TURF CALENDAR

Main St., Pennington, NJ. 08534; (609) 737-0890.

19-21—Landscape Ontario Horticultural Trade Association Congress '88. Sheraton Centre, Toronto, Canada. Contact: Jo-Anne Willetts, 1293 Matheson Boulevard, Mississauga, Ontario L4W 1R1; (416) 629-1184.

19-21—28th Virginia Turfgrass Conference & Trade Show. Richmond, VA. Contact: Katherine T. Martin, P.O. Box 527, Richmond, VA 23204; (804) 353-8699 or J.R. Hall III, Agronomy Dept., Virginia Tech, Blacksburg, VA 24061; (703) 961-5797.

20-22—Iowa Nurserymen's Association Convention & Trade Show. Des Moines Convention Center, Des Moines, IA. Contact: Marge LePorte, 7261 N.W. 21st St., Ankeny, IA 50021; (515) 289-1790.

20-22—Tennessee Nursery Short Course. Maxwell House Hotel, Nashville, TN. Contact: Dr. Ken Tilt, U.T. Box 1071, Knoxville, TN 37901-1071; (615) 974-1840.

20-23—Texas Association of Nurserymen Convention. Hyatt Hotel, Fort Worth, TX. Contact: B.R. Fullingim, 7730 South IH-35, Austin, TX 78745-6621; (512) 280-5182.

20, 27 (also dates in Feb.) Estimating Residential & Commercial Landscape Proposals. Extension Conference Center, Cook College, Rutgers University New Brunswick, NJ. Contact: Jim Morris (201) 932-9271.

21-22—Shade Tree Conference. Kansas Arborists Association. Manhattan Holiday Inn, Manhattan, KS. Contact: Charles Long, Waters Hall, Kansas State University, Manhattan, KS 66506; (913) 532-6170.

21-22—Think Trees. Albuquerque Parks & Recreation Dept. Albuquerque, NM. Contact: Robert Cox, 620 Lomas S.W., Albuquerque, NM 87102; (505) 243-1386.

21-23—Tropical Plant Industry Exhibition. Coconut Grove Exhibition Center, Miami, FL. Contact: TPIE, 5401 Kirkman Rd., Suite 650, Orlando, FL 32819; (305) 345-8137.

22—National Council for Interior Horticultural Certification Exam. TPIE Convention Coconut Grove, Miami, FL. Contact: Norma A. Gammon, 115 Abbot St., Andover, MA 01810; (617) 475-9417.

22—Western Chapter, International Society of Arboriculture Educational Meeting. Kellogg West, Cal Poly State University, Pomona, Calif. Contact: Denice Froehlich, P.O. Box 424, St. Helena, CA 94574; (707) 963-7578.

24-29—Institute for Facilities Management. Association of Physical Plant Administrators, Hotel El Rancho, Sacramento, Calif. Contact: Diana Tringali, 1446 Duke St., Alexandria, VA 22314; (703) 684-1446.

25-28—Central Environmental Nursery Trade Show (CENTS) & Ohio State Nursery Short Course. The Ohio Center, Columbus, OH. Contact: Bill Stanten, 2021 E. Dublin-Granville Rd., Columbus, OH 43229; (614) 431-2452.

26-28—Iowa Turfgrass Conference & Show. Des Moines Convention Center, Des Moines, IA. Contact: Dr. Michael Agnew, 105 Horticulture Building, Iowa State University, Ames, IA 50011; (515) 294-1870.

27-29—International Society of Arboriculture Midwest Chapter Conference. Holiday Inn Westport, St. Louis, MO. Contact: James Rocca, Conservation Dept., P.O. Box 180, Jefferson City, MO 65102, (314) 751-4115.

28—Southern California Spring Horticultural Trade Show. Los Angeles County Fairplex, Pomona, CA. Contact: Richard Staples, 3136 Root Ave., Carmichael, CA 95608; (916) 488-6434.

28—65th Annual Meeting, Connecticut Tree Protective Association. Aqua-Turf, Plantsville, CT. Contact: CTPA, P.O. Box 344, New Haven, CT 06513-0344; (203) 467-5600 or (914) 428-6700.

28—Western Cemetery Alliance Board of Directors Meeting. Coeur d'Alene Resort, ID. Contact: James A. Lahey, 1107 Ninth St., Suite 860, Sacramento, CA 95814; (916) 441-4533.

28-29—New Jersey Chapter American Society of Landscape Architects Annual Meeting. Resorts Casino-Hotel, Atlantic City, NJ. Contact: Richard Bartolone, Roger Wells Inc., 132 Haddon Ave., Haddonfield, NJ 08033; (609) 429-1577.

28-29—Horticulture Industries Show. Tulsa Convention Center, Tulsa, OK. Contact: Dr. Mike Kenna, Oklahoma State University, Stillwater, OK 74078-0481; (405) 624-5419.

31-Feb. 2—Empire State Annual Tree Conference. Westchester Marriott, Tarytown, NY. Contact: Mary Drake, NYSAA, 108 Ruskin Ave., Syracuse, NY 13207; (315) 472-2085.

31-Feb. 3—33rd Annual Southwest Park & Recreation Training Institute. Lake Texoma Lodge, Kingston, OK. Contact: Max Robertson, Parks & Recreation, P.O. Box 2570, Waco, TX 76702-2570; (817) 753-0222.

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MANAGEMENT IN BUSINESS

In this era of ever-changing opportunities, it is essential for growing companies in the green industry to know where to secure capital and what it will cost.

Sources of capital willing to invest in service companies in general—and in the green industries in particular—are evident by the large number of acquisitions taking place in lawn care today. This is but an example of the belief by other companies not currently in the industry that a significant return on their investment is available by operating a successful lawn care company.

If you haven't been developing a capital source for your firm, where can you turn?

Conventional source

Conventional financing sources of capital are: your banker, a secured loan from the state in which you operate your company, or one of the various federal financing sources available in your community. In many cases, conventional financing is not available to companies already over-extended in these sources. An alternative is to turn to another group of financing sources.

Secondary sources

Literally hundreds of secondary sources of capital are located all around the country. Some of them limit their investments to specific industries. Some differentiate their investment criteria by some specific business interest in which they have some expertise.

Wandtke and McGary are senior consultants with All-Green Management Associates in Columbus, Ohio. Dr. McGary focuses on marketing and management issues. Wandtke focuses on operations and financial questions.

These sources of capital are known as "venture capital companies" or as "small business investment companies" (SBICs). These companies often cover many business areas and their financing ranges from $100,000 to over $1,800,000.

Many of these firms lend and invest in secondary mortgages or subordinated debt, with a warrant to purchase shares of a company at a certain price at a future fixed date. If your business is already highly leveraged (high debt-to-equity ratio), and you can't borrow conventionally, you may wish to contact one of the firms who operate in your market area.

You should know of two operating issues when you deal with these capital sources.

1. When they invest in a company they oversee their investment by becoming a member of the board of directors with the authority of a majority owner of the company.

2. They will require regular management reports, monthly financial statements, and access to all operating results of the company as the reports are generated. They may even require the owner to send a narrative with the reports to help them interpret and understand what the reports are telling the company's management.

The need to secure funds from these secondary sources of capital may be a sudden opportunity, or the occurence of an unforeseen circumstance. Whatever the reason, the following is a list of ideas that will help you to raise the capital.

- Determine the amount of funds you will need. Then add 25 to 30 percent as a cushion.
- Document your capital requirements by preparing a monthly cash flow projection for the first year's use of the funds. Then prepare a monthly projection for the next year or two to demonstrate the probable repayment plan.
- Prepare monthly profit-and-loss statements and balance sheets for the same period for which the cash flow is prepared.
- Develop a one-page summary of your business detailing its history and concept.
- Provide additional information such as: past three years' financials, a brief profile of the management, and advertising brochures that you are using.
- Plan on sending your proposal to between four and 10 firms which lend funds in your market.
- Check with your accountant and lawyer before you send out any information on the company. You must be certain you have represented the company fairly and are not in violation of any federal or state security laws.
- One week after sending the package out to prospective investors, call to confirm that the material was received and is in the hands of the appropriate individual in the firms.
- Follow up in another one to two weeks for any preliminary interest or additional action.

Summary

It is important to identify the need for capital and then to quickly identify those investors who would be interested in your opportunity. Within 30 days after contacting the capital markets you should have enough feedback as to whether there is any interest in your proposal. Make sure your proposal to potential investors is succinct and framed in such a manner that the investor can make a decision—either yes or no.

LM

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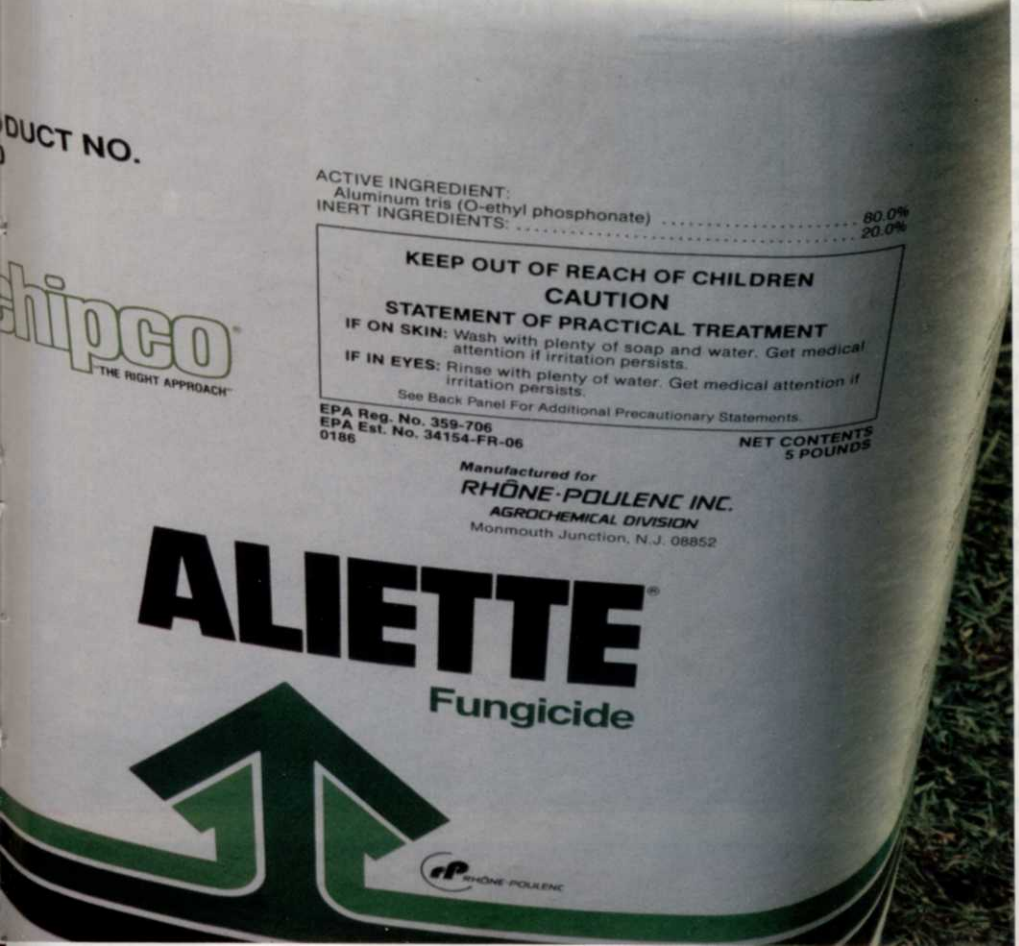
FUNGICIDE



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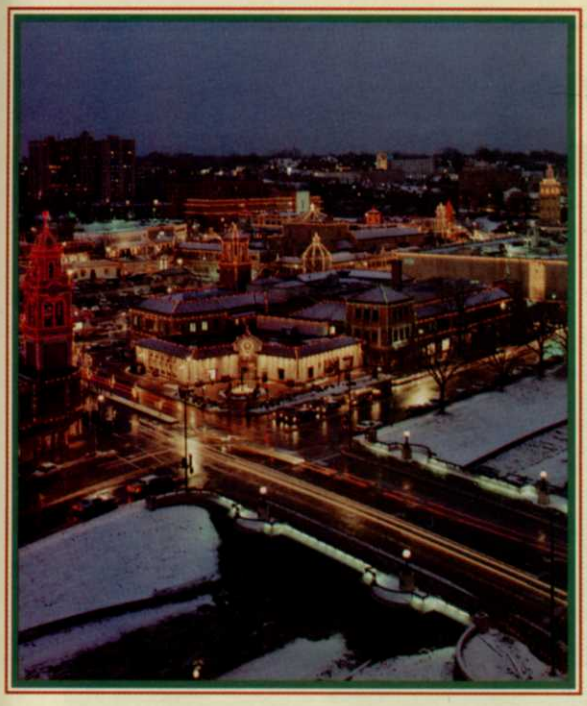
Circle No. 131 on Reader Inquiry Card

On Design

'T·I·S T·H·E Season

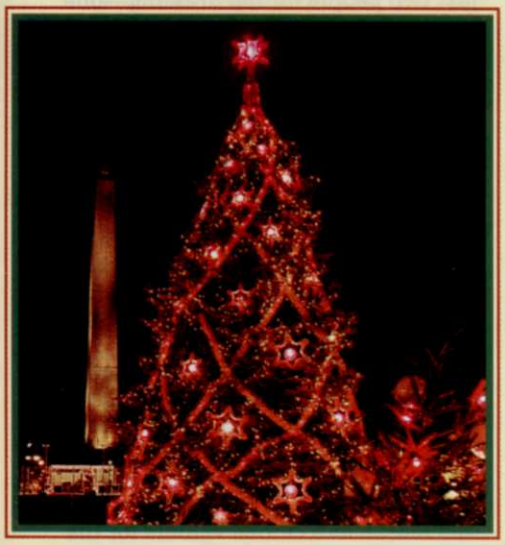
by Heide Aungst, managing editor

Perhaps the display which best reflects Yuletide tradition is the one viewed by millions at Rockefeller Center in New York City. The Center starts preparing for the holidays as early as August each year. For more than 50 years, New York has launched the Christmas season with the lighting of the giant evergreen on Rockefeller Plaza. The tree comes from places throughout the country each year. Pictured here is a Norway spruce (right) decorated with more than 18,000 multi-colored lights set on five miles of wire. The trumpeting angels (right) in the Channel Gardens, designed by Valerie Clarebout, is another signature of the season. White lights on the ilex glabra and junipers (right) highlight the plants in the angel display. The Exxon Building lights up its Douglas fir with multi-colored lights (above) while white lights highlight the shrubs. Of course, visitors to the Big Apple will also want to watch in the ice skaters at the famous Rockefeller rink.



People come from all over the world to view the annual Thanksgiving Day lighting of Country Club Plaza in Kansas City, Mo. Forty-seven miles of lights (that's 155,000 bulbs!) brighten the more than 60 acres of buildings and landscape. The plaza is the oldest planned suburban shopping center in the country. Most of the buildings in the area are owned and run by the J.C. Nichols Co. The Mill Creek Building (two-story building in the center of the photo) was the first store in the area, built in 1922. Three years later one string of lights decorated the building, a tradition that has expanded and grown during the past 57 Christmas seasons. Today, the one-story addition to the Mill Creek building houses Gerhardt furs. Red lights highlight the Giralda Tower (left side of photo). White lights decorate many of the Bradford pear trees which line the plaza's streets. Although snow covers most of the bluegrass/ryegrass turf here, the park areas are highly managed by Rosehills Garden Inc. "The plaza is my baby," says Everet Asjes, Jr., former president of Rosehills. "I still advise on it. It's a really beautiful area." Rosehills has managed the plaza's landscape for 20 years. The highlight after the Christmas lights is watching the more than 25,000 tulip bulbs bloom in the spring.

The National Christmas tree is the focal point of the annual Pageant of Peace in Washington, D.C. Frank LaGuisa of General Electric designs the lighting for the tree each year. The tree is chosen from various locations throughout the country. In this design (below), LaGuisa chose large lighted ornaments which will carry greater distances. The smaller lights on the tree fill in the tree's form. A moderate amount of flood lighting picks up the sparkle in the tinsel. A new technique uses cycling controls on the tree to slowly change the color of the major ornaments.



One of the most beautiful Christmas lighting displays is in Cleveland, Ohio, home to lighting experts General Electric. Every year, the G.E. headquarters shines with multi-colored lights (above). G.E. designer Frank LaGuisa offers Christmas landscapers some lighting tips:

Note that there is no pattern of garland.The tinsel-trimmed star ornaments create a pattern which carries the design for distant viewing. The ground-level floodlighting makes the tinsel shine. The two styles of luminous ornaments are the only lighting on the tree itself. A good technique is to surround the featured tree with smaller trees. The clear sparkly lights on the smaller trees provide a more traditional foil for the highly stylized feature tree.

Top dressing in half the time

The grain cart auger fills the Vicon Spreader hopper in a matter of minutes at Hercules Country Club.

Tom Kelleher improved his top dressing operation two years ago when he switched from a dump truck/pull-type top-dresser method to a vehicle-mounted spreader.

Kelleher is grounds superintendent for Hercules Country Club, a 27-hole course located in the rolling countryside of New Castle County, Delaware, near Wilmington. Although pleased with the improvement in his top dressing operation, he still sought a way to cut the time needed for refilling the spreader, a Vicon spreader unit mounted on a Cushman Turf-Truckster.

It took 15 to 16 hours to top dress the 27 greens because the operator had to return to the maintenance building frequently to refill the unit's 700-lb. hopper.

Using some characteristic "Yankee ingenuity," Kelleher and his assistant superintendent, Paul Glenn, came up with a better idea. They bought a used John Deere grain cart equipped with auger from a local farm implement dealer. They had to make some minor modifications so the cart and auger would handle the top dressing mix of 70 percent sand, 15 percent topsoil and 15 percent peat.

Then, using a small utility tractor to pull it, the grain cart became a "nurse tank" for the top dressing operation. It cut their top dressing time in half.

The grain cart auger, operated from the power take-off of the tow tractor, is used to refill the spreader unit hopper in a matter of minutes. When full, the grain cart holds enough to fill the Vicon hopper 10 times—enough to do nine greens, putting on about 1/3 yard per green. That means the top dressing crew can do the entire course with just three trips to the maintenance area to refill the cart. And the Cushman-mounted spreader unit can continue top dressing while the cart is in for another load.

"It used to take us eight to 10 hours to do 18 greens," says Glenn. "Now, with the Cushman/Vicon combination and the grain cart, we do 27 greens, the putting greens and the nursery in six to eight hours."

The greens at Hercules Country Club are top dressed with 70 percent sand, 15 percent topsoil and 15 percent peat.

The improvised system cut labor costs, too. With the former set-up, it took one person to drive the dump truck and two to run the walk-behind top dresser.

"We had to use two men so they weren't walked to death," says Glenn.

Now Hercules Country Club uses just two people for top dressing—one to drive the Cushman/Vicon Spreader unit and one to operate the tractor pulling the "nurse cart."

Hercules Country Club's first 18 holes opened in 1937. Nine holes were added in 1967. According to Glenn, the Hercules course has a reputation of "some of the most demanding golf holes in the region." The par 72 18-hole course is 6,270 yards. The nine-hole addition is a 35-par, 2,889 yards.

Hercules Country Club includes a driving range, swimming pool and eight tennis courts. The club has more than 2,000 members. Kelleher's grounds crews have used Cushman vehicles for years. One Turf-Truckster is used for spraying and a new Turf-Truckster just went into service this season as a course vehicle for the golf course ranger. **LM**

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Circle No. 103 on Reader Inquiry Card

PROBLEM MANAGEMENT

by **Balakrishna Rao,** Ph.D.

Oak iron deficiency

Problem: *I would like to treat a number of large red oaks showing iron deficiency. Can we effectively manage the problem by foliar application of iron-containing products? Are there any good products in the market for this purpose? (Texas)*

Solution: No, the foliar application of iron will not correct the problem completely. Our experience has shown that chlorotic red oak leaves do not absorb an adequate amount of iron to correct the problem satisfactorily. To avoid wound injury, soil application of iron product is recommended. However, this alone may not correct the situation satisfactorily, particularly if the trees are suffering severely from iron deficiency.

Therefore, first provide ferric ammonium citrate through trunk injections for quick recovery. This should then be supplemented and followed by soil application of chelated iron to maintain the iron requirement of plants. Trees smaller than three to four inches in diameter should not be trunk injected because of the potential for injury. Soil treatment of iron is recommended in this situation. Water the treated area to move the iron product to the root zone for better uptake. Avoid treating when trees are under moisture stress in order to avoid any phytotoxicity problems.

Treating crabgrass

Problem: *We have been using either Betasan or Dacthal in our early spring applications for crabgrass control. This year we have experienced a large number of calls from our clients. What are we doing wrong? What is your opinion on using a post-emergent? Is it possible to skip the pre-emergent application completely and use only the post-emergent in our second treatment around May to June? (New York)*

Solution: The use of pre-emergence herbicides like the ones you have mentioned is the best approach to managing crabgrass problems in established turf areas. To determine why you are experiencing too many crabgrass calls, make a survey of several treated and untreated areas and inspect the lawns. This would help analyze the reasons for poor crabgrass control.

According to the manufacturers' guidelines, one can at best expect about 80 to 85 percent control of crabgrass when using pre-emergence herbicides. Compare the treated lawns with untreated sites like parks, etc. to determine how well the product has provided control and how environmental conditions were this year for crabgrass growth. Reports indicate that this year many people have had poor crabgrass control.

Several factors either individually or cumulatively contributed to the crabgrass problem. Remember that these herbicides provide a thin chemical barrier which is toxic to germinating crabgrass seedlings. Results will vary if this chemical barrier is affected by raking, traffic, insect activity, heat and/or photodegradation of the active ingredient.

Generally, opportunistic weeds like crabgrass appear in thin areas, resulting from poor nutrition, insect and disease activity, or drought. In many situations, the labelled products have out-performed manufactured suggested percent of control. However, quite often when clients find a few plants in their lawns it becomes quite objectionable, which is a common problem in our industry. Educating the clients as to product performance and the state of the art in crabgrass control might be very helpful.

Success in managing crabgrass using post-emergence materials like DSMA, MSMA or Acclaim! depends upon proper timing of the application. For best results, the materials should be applied onto juvenile seedlings (two-leaf stage). This would require proper monitoring and identification of the plant materials. Depending upon the number of seeds carried over from the previous years, the results may vary.

In many situations, the crabgrass problem is recognized when the plants have matured. Reports suggest that variable results can be expected when post emergence materials are being applied onto mature plants.

In some situations, if the plants begin to produce more than one tiller, the management is difficult. At this stage of development, the major objective is to arrest the growth of crabgrass and prevent seedhead formation for which these materials can be very effective. However, these chemical products may temporarily discolor the turf for two weeks following the application. Therefore, read and follow label specifications for best results, and also let your clients know the advantages and disadvantages of these post-emergence crabgrass treatments.

Regarding your question concerning using post-emergence materials in place of pre-emergence materials, I feel that theoretically it should work fine. However, in practice, to achieve good results, the post-emergence products should be applied at the proper time. If this is feasible, try to apply the materials to a few lawns in order to understand more about the product performance and service practices. If the lawns appear to be thin after removing the crabgrass, you may have to overseed the area with compatible turfgrass cultivars and provide a balanced fertilization and pest management program as needed to maintain turf density and quality.

Balakrishna Rao is Director of Lawn Care Technical Resources for The Davey Tree Co., Kent, Ohio.

Questions should be mailed to Problem Management, Landscape Management, 7500 Old Oak Boulevard, Cleveland, OH 44130. Please allow 2-3 months for an answer to appear in the magazine.

TRY TO SEE WINTER THIS WAY

While your competitors are locking up their lawn equipment for the winter months, you can be producing income with yours. Use your equipment to apply Great Salt Lake Minerals & Chemicals deicing products, **QWIKSALT® + PCI®** corrosion control polymer and **FREEZGARD™ + PCI®**, during the winter. These products are more effective and less corrosive than other deicing products. You can keep roads and parking lots clear of ice and snow, and put money in your pocket while your competition is hibernating. Interested? Simply call (801) 731-3100 for the facts.

Circle No. 120 on Reader Inquiry Card

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PRODUCTS

Five-speed engine goes on all terrain

Exmark Manufacturing's 32-inch commercial power mower is equipped with a five-speed transmission for a smooth cut on all terrain. It has hinged grass deflectors which flip up

for easy removal or attachment to the grass catcher.

The operator can adjust mowing heights quickly with easy adjust casters. The mower is available with either an 8 or 12 hp Briggs & Stratton or 12.5 hp Kawasaki engine.

Circle No. 190 on Reader Inquiry Card

New product for hazardous spills

A new line of absorbent socks has been introduced by Dudick Corrosion, which calls them "the best absorbency in the industry."

Wolf and Super Wolf Absorbent

Socks can absorb acids, caustics and flammable solvents. They come in a polyethylene pail, in which they can be disposed.

The Super Wolf, which weighs one pound, can absorb 15 pounds and will not seep or leach. The Super Wolf is 44 inches long and four inches in diameter. The oil-only regular Wolf, which can absorb 7½ times its weight, will absorb petroleum-based fluids while allowing aqueous solution to pass through.

Circle No. 191 on Reader Inquiry Card

Rotary mower features compact construction

A new rotary mower line from Ingram Kut-Mor Co. features shorter mowers that include actuator power steering systems for improved handling. The company has also introduced the 623DW, powered by a 24 hp water-cooled Perkins Diesel engine. All Kut-Mor mowers include power steering, hydrostatic drive and fluid deck drive as standard equipment.

Circle No. 192 on Reader Inquiry Card

Multi-tank spray truck applies versatility

The "Trident" lawn sprayer from Green Pro Services, Grass Roots Nature's Way, Inc., features a low-profile, "non-threateneing" appearance, according to the company.

The multiple tank system includes three 200 gallon tanks and one 50 gallon tank for special applications and curbside mixing. The Trident, can be used for lawns, trees or shrubs, and comes with an electronic flow meter, locking cabinets and truck signs.

Everything is mounted on a 12-foot flatbed available on an Isuzu NPR Diesel chasis.

Circle No. 193 on Reader Inquiry Card

Motor oil upgraded to meet new engine requirements

Delvac 1 synthetic motor oil from Mobil Oil Corp. has been upgraded with a high-performance formula to meet and exceed new engine and transmission requirements developed in the past 10 years.

The oil is designed for trucks, buses, construction and off-highway

equipment, farm equipment and logging equipment.

Delvac 1 is an SAE 5W-40 synthesized hydrocarbon-based product with a pour point of 60 degrees Fahrenheit and will pump down to -50 degrees.

Circle No. 194 on Reader Inquiry Card

Root ball grabber a one-person show

The Kinggrabber is a one-person tree handling system that attaches to Coyote C14 loaders.

The root ball grabber easily plants or lifts trees out of the ground without damage to the tree, the root system or the trunk. Powered by the C14 hydraulic system, the attachment can be operated easily from the cab of this loader.

The Coyote C14 loader has a lift capacity of more than 4000 lbs. with the Kinggrabber attachment. Other attachments available for the Coyote

C14 are bucket, forks, scarifier and tree spade.

Coyote C14: Circle No. 195
Kinggrabber: Circle No. 196

Monofilament line replaces blade on mower/trimmer

The UnBlade from the UnBlade Company is a combination mower/trimmer/mulcher/bagger.

Instead of steel blades, it employes 12 monofilament lines made of Xenoy, guaranteed to last an entire mowing season. Line replacement can be completed without removing the UnBlade from the mower.

Because it doesn't use blades it can go on rough rocky terrain, cut tall or wet grass easily and doesn't cut garden hoses or tree roots. When coupled with the Trim-A-Lawn mower, a door on the side of the mower can lift up to expose 2½ inches of line for trimming around trees, houses and shrubs.

Circle No. 197 on Reader Inquiry Card

Brochure details loader/backhoe

A full-color brochure describing the JI Case Model 580K loader/backhoe is now available. The eight-page brochure highlights features of the loader/backhoe, including the two-wheel- or four-wheel-drive options, the Case 63 net horsepower diesel engine, the 5500-lb. lifting capacity and the 18-ft. 2-in. digging capacity.

Circle No. 198 on Reader Inquiry Card

Non-toxic herbicide is also biodegradable

A new non-toxic herbicide for weed control is available from Safer, Inc. TopGun is a broad-spectrum contact vegetation killer that destroys unwanted weeds on contact without leaving harmful residues in the soil.

The active ingredient in TopGun is a blend of fatty acids that disrupt cell membranes, causing the vegetation to shrivel and die. Seed beds or grass can

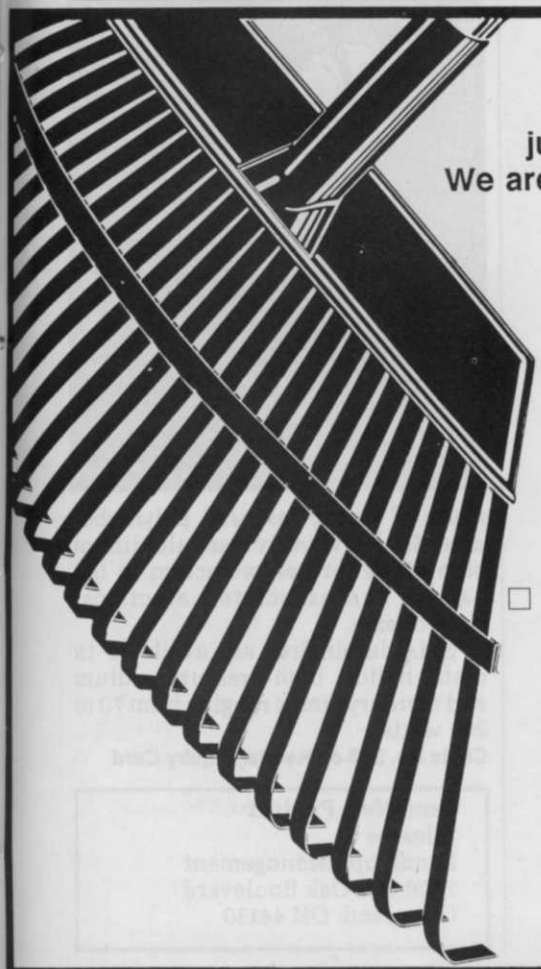
be replanted within 48 hours after application of TopGun.

Safer's line of natural products includes insecticidal soap, moss and algae killers, sulfur-based fungicide, insect traps, herbicides and plant protectants.

Circle No. 198 on Reader Inquiry Card

Hydraulic reel mower suits many needs

A line of innovative hydraulic reel mowers that turn any tractor into a turf mowing unit without dedicating it to one task has been unveiled by John Deere.



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A subsidiary of environmental industries, inc.

Personnel Department
24121 Ventura Boulevard
Calabasas, CA 91302

The mowers are pull-behind units that provide a hydraulically-driven set of reel mowers for golf fairways and other sports turf.

The model 305 has five 30-inch reel mowers with a 142-inch cutting swath. Optional 4-, 8- and 10-blade reels are available. The model 303 has

three 30-inch mowers with an 86-inch swath.

Both can cut heights from ⅜-inch to 2⅜ inches; both have rear rollers and scrapers, adjustable skids and hydraulic reel lifts.

Circle No. 200 on Reader Inquiry Card

Tree transplanter is completely self-contained

Mid Dakota Corp.'s towable transplanter is a self-contained unit which

will go anywhere a garden tractor will go. It won't damage lawns or underground sprinklers.

The cradle can be positioned at any level above ground to allow for varying root ball sizes. Once the cradle is positioned, a jack hammer drives the spades into the ground. Then, hydraulics lift the tree and puts it in the ground or in a pot.

Circle No. 201 on Reader Inquiry Card

Stump cutter performs in tight places

Rayco has introduced a new stump cutter which is portable or truck-towed. Model RG 1620 (JR) is designed for use where working clearances are tight.

A 20 hp Kohler gasoline engine powers the cutting action, while a hydrostatic motor provides on site self propulsion. Field performances have shown RG 1620 (JR) to be versatile and productive.

Circle No. 202 on Reader Inquiry Card

Sentry luminaire gives off directed light distribution

The new Sentry SMA series luminaire comes with an internal refractor for directed light distribution. The refractor can yield either symmetric or asymmetric distribution. Asymmetric lighting is frequently used to separate lighting between a road and pedrestrian sidewalk.

The Sentry SMA series uses a globe

made of sturdy textured polycarbonate. Its heavy-duty cast aluminum base offers further protection to the ballast and associated electrical components.

SMA luminaires are available in metal halide, high-pressure sodium and mercury lamps ranging from 70 to 250 watts.

Circle No. 203 on Reader Inquiry Card

Send New Product releases to:
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Circle No. 126 on Reader Inquiry Card

Shed new light on your shade tree operation.

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December 11 Chicago, IL Area	**January 23** Manhattan, KS	**February 19** Kansas City, MO	**February 28** East Peoria, IL	**March 4** Canton, OH	**March 11** Tuscon, AZ	**March 29** San Jose, CA
December 17 Long Island, NY Area	**January 27** Philadelphia, PA Area	**February 22** Cleveland, OH	**February 29** Murfreesboro, TN	**March 4** Omaha, NE Area	**March 11** Des Moines, IA	**March 30** Concord, CA
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January 8 Bloomington, MN	**February 2** Albuquerque, NM	**February 23** Lansing, MI	**March 1** Owensboro, KY	**March 7** Knoxville, TN	**March 18** Toledo, OH	**April 1** Fargo, ND
January 13 New Brunswick, NJ Area	**February 3** Allentown, PA Area	**February 24** Indianapolis, IN	**March 1** Chickopee, MA	**March 7** Springfield, OH	**March 18** Sioux Falls, SD	**April 14** Seattle, WA
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January 15 Twin Falls, ID	**February 9** Gaithersburg, MD	**February 25** Las Vegas, NV	**March 3** Savannah, GA	**March 8** Spartanburg, SC	**March 24** Ventura, CA	
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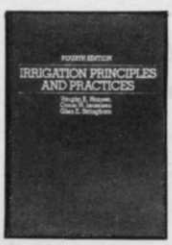

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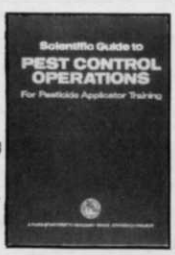

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LANDSCAPE MAINTENANCE SUPERVISOR: Expanding landscape management firm seeking individual with supervisory ability and a minimum of two years experience in maintenance and/or installation. An agricultural related background or degree would be beneficial. Send resume with salary requirements to: Maintain Inc., 16008 Boss Gaston, Richmond, TX 77469, Attn: Branch Manager. 12/87

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Must have 5 years experience in major commercial landscape construction projects and a thorough knowledge of building construction.

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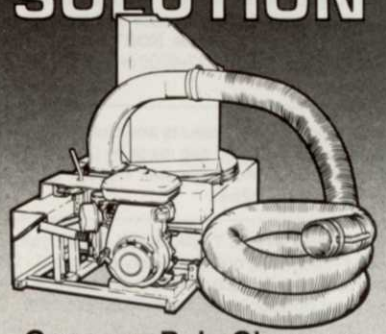

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CAREER OPPORTUNITIES: Branch Operations and Telemarketing Sales managers needed. Rapidly growing East Coast lawn care company. Northeast and Southeast locations. Great salary and benefits to those qualified and fabulous upwardly mobile career potential. Send resume and salary requirements to LM Box 442. 12/87

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Experienced Landscape Forman

Must be experienced in all phases of landscape installation and be able to handle a landscape construction crew.

Please send resume to:

Mr. R. Scofield
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LANDSCAPE MAINTENANCE AND CONSTRUCTION FOREMEN: Suburban Cleveland firm is seeking experienced individuals who can work together with other people. Must be hard working, organized and capable of directing a project from beginning to end. Salary commensurate with experience. Send resume to: P.O. Box 391002, Solon, OH 44139. 12/87

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LANDSCAPE & IRRIGATION FOREMEN
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MANAGEMENT: Ever-Green Lawns Corporation, a division of the multi-national Hawley Group, Ltd. is looking for experienced lawn and tree care professionals. Please respond in writing only to Richard D. Niemann, Corporate Recruiter, Ever-Green Lawns Corp., 1390 Charlestown Industrial Drive, St. Charles, MO 63303. TF

Wanted - Manufacturers rep with successful sales force to sell turf sprayng line. 38 year old Midwestern manufacturer of agricultural sprayers is expanding to turf industry and needs manufacturers rep for sales support. Opportunity for the right firm to have input into product line. Send organizational information to: Jim Weaver, V.P. Sales, Kuker Industries, Inc., Box 37589, Omaha, NE 68137. 12/87

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CHIEF OF OPERATIONS

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Qualifications: Five years experience in management positions, the ability to develop and track budgets, excellent analytical and leadership skills, and the ability to work with community and constituent groups.

Salary commensurate with experience. NYC residency required.

Send resume to:

CITY OF NEW YORK
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Equal Opportunity Employer

LANDSCAPE DESIGNER AND ESTIMATOR. Design/build landscape construction firm is seeking an experienced designer and estimator. Must be able to handle the job from sales to completion of job. Must have good graphic ability. Salary and benefits commensurate with ability and experience. Send resume to: P.O. Box 725, Utica, MI 48087. 1/88

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Seeking manager to develop and expand our maintenance department, demonstrable experience in the areas of maintenance sales and production required. Expect first year sales of $300,000, and be willing to base salary upon sales and production. Seeking individual who is willing to believe in himself, perform, and be paid handsomely for his initiative. AYS Landscape Company, 31 W. 545 Diehl Road, Naperville, IL 60540, (312)983-0094. 12/87

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1985 Locke 86" professional, hydrostat, 5 blade reels, 16HP ic, electric start, 50 hrs $5,500. Pumping systems inc T105-2, skid, 200 gal fiberglass, 8HP ic Green Garde, Hannay, new $3500. Two Ingram 582-G, 72", 23HP Kohler. 50 hrs $4500, 300 hrs $4000. Ingram sand kat, 16HP Onan, 200 hrs, ballfield and sand trap rakes, $5500. Two Avenger ¼ ton dump haulsters, 8HP Kohler new $2200 used $1500. Cushman topdresser, used once $1200. Two used turf pro 84, other turf equipment. Call (305) 592-2206. 12/87

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Join together

It seems logical that the collective green industry should address potentially adverse issues together, under a unified voice. Issues such as unfairly restrictive pesticide legislation, new tax laws and even new student recruitment can be dealt with from a stronger position if trade organizations unite.

In case you haven't noticed, there's quite a bit of common ground under the various feet of green industry interests. Why, therefore, should various organizations react to these attacks alone? Granted, the Professional Lawn Care Association of America did an excellent job of counteracting the effects of "environmentalists" pushing for a "poison-free" country. But the legislation and other measures introduced as a result of this negative campaign, if carried through, would have a more far-reaching effect than strictly on LCOs. It would affect any commercial operator who sprays potentially hazardous chemicals, which amounts to most of you.

So why not unite? Remain autonomous, but cooperate with one another. The move has already begun, a summit meeting of sorts held in Baltimore at the 1986 PLCAA conference. But it must be carried through.

Ron Kujawa of KEI Enterprises suggests banding together to attack one issue a year, be it legislation or whatever, and concentrating an effort over a certain period of time, maybe a month or two, exacting as much influence on the issue with available resources—which are plenty. Mobilize your memberships, take 10 minutes to write a representative or senator. The benefits will be greater if six, eight or 10 groups are yelling together in one voice, rather than one group just yelling.

Jeff Sobul

Jeff Sobul, assistant editor

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